Trains

November
1943
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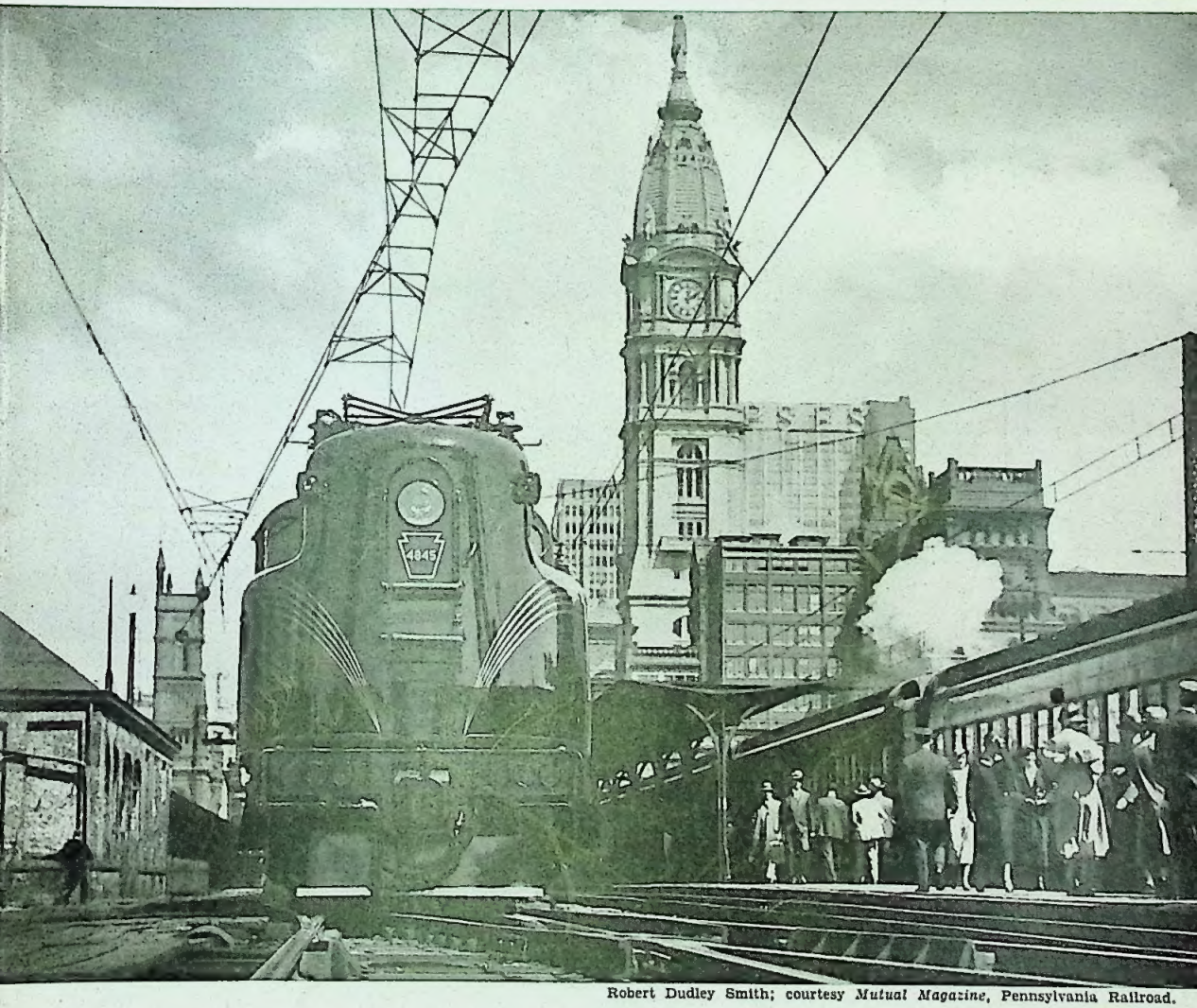

Robert Dudley Smith; courtesy *Mutual Magazine*, Pennsylvania Railroad.

Broad Street Station, Philadelphia, is a busy spot on the Pennsylvania Railroad.

November, 1943

Trains

Volume 4 Number 1

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MODERN signaling is playing a stellar role in the railroads' war performance. This is spotlighted by the performance of the country's longest C. T. C. installation, recently put into service over 175.6 miles of single-track Union Pacific main line between Las Vegas, Nev., and Daggett, Calif. With centralized traffic control, all main-line switches and most signals are under direct control of the dispatcher, and instead of issuing train orders for the meeting and passing of trains, the dispatcher merely moves the right switches from his desk, sets the signals to convey his orders to the train crews, and the trains make their movements as he intends without red tape and oftentimes without stopping for meets. All movements are under perfect protection, for automatic block and interlocking are integral parts of the C. T. C. system. A track diagram shows the dispatcher where all trains are at any time, and he can easily decide where trains should meet so as to lose the least time.

The UP's 175.6-mile section is a part of the critical and warbusy line from Salt Lake City to Los Angeles, and was chosen for C. T. C. because of long, heavy grades which slow the trains and decrease track capacity. Trains have been moving in such numbers that with train-order operation the dispatchers simply were not able to issue the orders fast enough to keep traffic moving. Freight trains lost so much time waiting for orders that some trains even had to carry two crews to avoid being caught by the 16-hour law. *Railway Age* reports that, with C. T. C., freights are covering the subdivision in less than 10 hours compared to between 13 and 16 hours before, and in one week after C. T. C., approximately 95 per cent more cars were handled westbound and 130 per cent more eastbound than in a similar period a year previous. The average time of freight cars on the subdivision has been cut three hours.

Two-unit searchlight signals are used at the entrances to passing sidings, and red over yellow means "take siding." Other signals are single-unit searchlight type and display the usual red, green, and yellow indications. The control machine is at Las Vegas, the extreme eastern end of the territory, and the controls are sent out and indications returned over two line wires. It is this use of two line wires which is the heart of C. T. C. Electric interlocking over a small area, such as a terminal, does the same work as does C. T. C. over a long stretch of main line, but separate wires are used for the various signal and switch controls. The large amount of wire needed would make such installations impracticable on main-line mileage. The development of the coded system and its first use on the Pere Marquette June 30, 1928, may be taken as the birth of practical C. T. C. Without this improvement of the last 15 years, railroads would have many an unopened bottleneck hampering the steady flow of war traffic.

The plucky Rutland Railroad is 100 years old November 1.

A complete history and motive-power roster of the Denver, South Park & Pacific [see page 8, this issue] and Colorado Central narrow-gauge lines has been under preparation for some time by M. C. Poor of Chicago, and when complete will be published in a bulletin of the Railway & Locomotive Historical Society.

The Susquehanna has placed a new two-car, streamlined, air-conditioned motor train in suburban service to augment the two single-car units which have been so successful in rebuilding patronage.

The Chicago subway [May TRAINS] opened for regular business October 17. Original service is made up of a portion of the former elevated service, and the balance of the L service still uses the loop. The intercity North Shore electric trains are prohibited from using the tube for a year, but if conditions then will permit such use without interfering with local service, it is possible that the North Shore will run in the subway.

A. C. Kalmbach.

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till the lights go on again

THE railroads face tasks today that are difficult to picture.

Passenger traffic has just about doubled in the last year.

A troop train starts off every six minutes of the day and night.

A freight train starts off every four seconds.

All this must be handled with just about the same equipment the railroads had before the war.

That means greatly increased wear and tear on engines, cars, rails and other equipment. And till the war is over, and the lights go on again, adequate replacement will not be possible.

But the day is coming when this replacement will be imperative. And it is going to take billions of dollars.

Where will this money come from?

We think the right way to provide it is to permit the railroads to build up adequate reserves now which can be used to pay for new cars and locomotives, new track and other facilities to replace those now being worn out in war service.

If this is done, the railroads will be able to keep on providing the dependable, low-priced transportation which made possible the peacetime growth and development of this country, and which is now an essential part of the nation's war effort.

ASSOCIATION OF AMERICAN RAILROADS

ALL UNITED FOR VICTORY

Robert A. LeMassena, 398 N. Maple Ave., East Orange, N. J.

The Lackawanna

A Brief

★ **The New York-Buffalo short line climbs over the beautiful Pocono Mountains.**

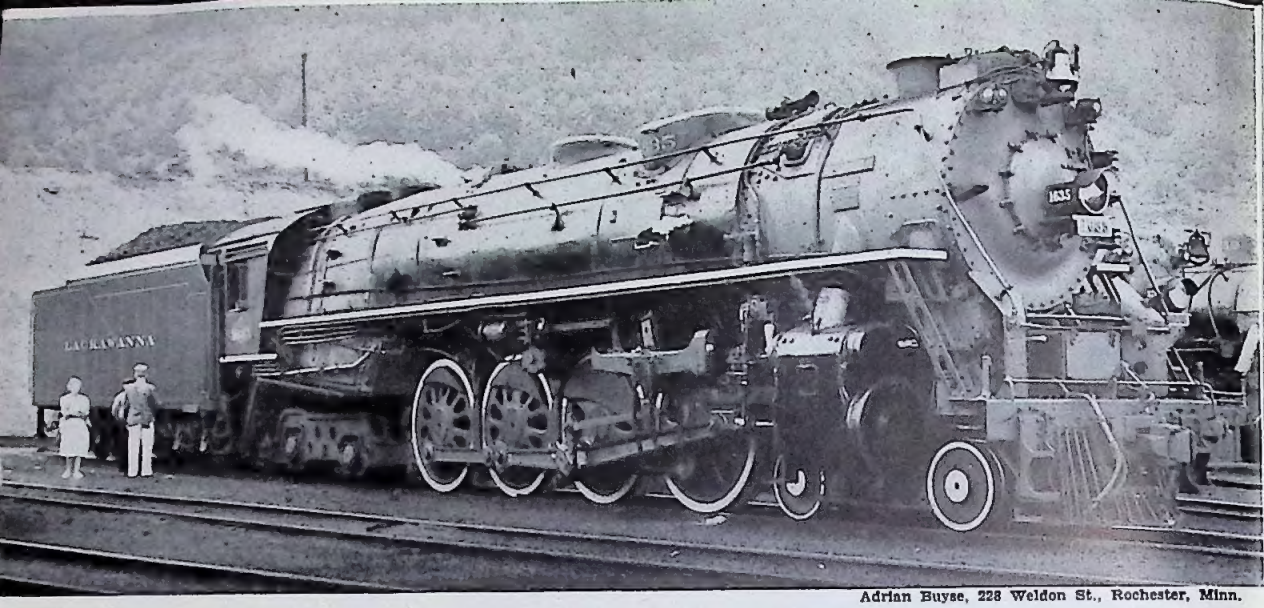
OTHER roads may call the 4-8-4 type of locomotive the Northern, but to the Delaware, Lackawanna & Western it is the Pocono. And the nickname is indeed appropriate, for the Lackawanna's 4-8-4's see their toughest action over the Pocono Mountains in northeastern Pennsylvania. By hurdling this ridge the Lackawanna earns the shortest New York-Buffalo mileage, 396, over which it sends four through passenger trains each way daily.

Hoboken, across the Hudson River from downtown New York, is the Lackawanna's terminal, and from the squat, betowered station with its ferry slips and its butterfly trainsheds the *Lackawanna Limited* pulls west at 9:20 each morning for the daylight run through some of the most beautiful scenery in the East. In the New Jersey suburban area the Lackawanna operates a frequent electric commutation service, and as far as Dover (39 miles) the *Limited* is under trolley wires, although pulled by its through steam locomotive. The course is westward across New Jersey with most of the other railroads in sight at one time or another. In the west-

The road of anthracite.

Like most hard-coal roads, the Lackawanna once had hundreds of cab-in-center locomotives like the switcher below, but now every last one of them has been either scrapped or rebuilt to the conventional type. The 1504 (left) is one of the 4-8-4 passenger engines used on through trains.

J. Lawrence Dixon, 5132 Locust St., Philadelphia, Pa.



Adrian Buyse, 228 Weldon St., Rochester, Minn.

The 1600-series 4-8-4's of the Lackawanna (above) are very like the 1500's except that they have smaller drivers for freight service. The heavy train below is on the Lackawanna Cutoff near Andover, N. J., and the train on the opposite page is the Lackawanna Limited at Summit, N. J.

Donald W. Furler,
65 Glen Ave., Glen Rock, N. J.

ern part of the state the Lackawanna hits high ground with a wide panorama visible from the car windows. This high viewpoint is repeated time and again before Buffalo is reached at 7:05 p. m., with the most striking view near Dansville, south of Rochester, where the Lackawanna station is perched high above the town on a hillside, giving a far-reaching view of the green farms of the Finger Lake country.

Like the Delaware River, the Lackawanna uses the Delaware Water Gap to cut through a high ridge which protects the flank of the mountains. Past Mount Pocono the railroad strides across high ground, dips into Scranton, and then again takes to the heights on the way to Binghamton. From here westward Lackawanna and Erie follow opposite banks of the Susquehanna River on a winding, typical water-level grade.

The Lackawanna is good railroad, a line over which passenger trains can make fast time and

on which freight is moved with conservative power requirements. This is so largely because of two immense improvement projects completed in 1911 and 1915, when the road was exceptionally well fixed financially. The first of these was the Lackawanna Cutoff, a 28-mile line striking straight east from the Delaware Water Gap to save 11 miles over the old meandering route, but at the expense of some of the heaviest railway earthwork ever placed.

The second major improvement was north of Scranton. The old grade of 1.45 per cent out of Scranton to Clark's Summit, 7 miles, could not be bettered, as Scranton is in a deep valley with sharp climbs on all sides, but from Clark's Summit northward for 39.6 miles the line was entirely replaced, with grade and curve improvements which saved 20 minutes' time on passenger trains and an hour on freight trains, as well as saving two helper engines on the 3800-ton freight trains of 1915. This section of line includes the Tunkhannock viaduct, world's largest reinforced-concrete bridge.

Anthracite has always played a large part in Lackawanna freight revenues, and the road is grouped with Lehigh Valley, Reading, and Central of New Jersey as one of the "anthracites." The 67 miles of suburban electrification and air-conditioning on through trains have taken the place of hard coal as sales points, but oldsters still remember Phoebe Snow and the advertising jingles of 40 years ago:

"Miss Snow alights, her frock still white.
She took the road of anthracite."

Odd freight loads.

Railroads receive all kinds of calls in their business. An odd one has been to supply snow for ski slides. In the years between 1937 and 1941 the Norge Ski Club of Cary, Ill., had to call on the railroads each Winter for snow for its slide. In 1937 seven cars of snow were transported by rail from Escanaba, Mich. In 1938 three cars were railed from Escanaba. In 1939 seven cars were sent to Cary from Eagle River, Wis. In 1940 five cars were routed out of Beloit, Wis., for the benefit of the skiers. In 1941 it was Eagle River again, which sent seven cars.—*John T. Follansbee.*

Dana D. Goodwin, 356 Main St., Fitchburg, Ma

THE OLD SOUTH PARK

Or how Mr. Goula won and lost it, how it rose to fame and glory only to fall to the depths of bankruptcy, and other stories to the present day.

By A. C. Kalmbach.

"ENGINE 76 run extra Leadville to Climax and return to Leadville on last trip of narrow-gauge operation. Pick up at Climax and handle to Leadville all narrow-gauge cars. E. P. S." This train order, dated August 25, 1943, was patently padded for public consumption; and well it might be, for this trip was an Occasion. The Associated Press was there, as was the mayor of Leadville. Albert Fenn, of *Life* magazine, took pictures; and Robert Rice, vice-president of the Colorado & Southern, passed a box of cigars. They were honoring the memory and mourning the passing of a onetime great railroad. This was the last run of the narrow-gauge best known as the Denver, South Park & Pacific, once the most spectacularly successful railroad in all the West.

This was the route of the fish trains and of the narrow-gauge Pullmans. It was the short line from Denver to Leadville, crossing the Continental Divide twice on the way. At high Alpine Pass, on the way to Gunnison, it had still a third crossing of the Divide in a tunnel at an altitude of 11,596 feet. In a short half-dozen years of its fabulous career it skyrocketed from a gross revenue of $25 a day to $10,000 a day!

At its greatest expanse, just after the turn of the century, the old South Park was a 341*-mile system. Its three-foot-gauge track ran southwest of Denver, following the South Platte River up the canyon into the front range of the Rockies. At South Platte, 29 miles out of Denver, the line turned west, still following the water-level grade along the north fork of the South Platte. The railroad was now well into the Platte Canyon, a rocky chasm with a rushing stream in its bed and a friendly rival in its beauties to the better-known Clear Creek Canyon. The railroad twisted and turned, its roadbed fitted ingeniously into the narrow space between the bed of the stream and the towering rock walls.

As the canyon bed gained elevation, the valley flattened out until the railroad found itself at the foot of the sharp climb up Kenosha Pass, where, at 9991-foot elevation, the line crossed over into the northern extremity of that broad, high valley called South Park, from which the railroad took its name. To the south was the extensive beauty of the park. To the north lay the heights of the Continental Divide.

At Como, 88 miles from Denver, the line divided, one stem going to Gunnison and the other to Leadville, the two-mile-high mining city with resources of lead, gold, silver, zinc, copper, iron, bismuth, and manganese. Leadville lies on the Atlantic side of the Continental Divide, but the old South Park swung north from Como, crossed the Divide at Boreas Pass onto the Pacific Slope, and then again crossed the divide at Fremont Pass to reach Leadville. It was here that railroad men were up against some of the toughest of operating problems. The grade between Como and 11,494-foot Boreas Pass was 4.49 per cent. It was on this terrific climb that Barnum's elephants once obligingly helped push a three-car circus train when

* This does not include the Colorado Central narrow-gauge lines in Clear Creek Canyon, which started separately but wound up along with the South Park as part of the C&S.

the engine stalled. It was Boreas Pass and the 4.2 per cent eastbound grade up Kenosha Pass which contributed most heavily to the South Park's average of twice as many engine-miles as train-miles. Here, too, were snow troubles, with 11 snow sheds up the east slope of Boreas and four engines to a rotary in Winter.

From Boreas Pass can be seen great areas of both the Atlantic and Pacific slopes. To the north and the west stretches the great, broad valley of the Blue River, shadowed by the ponderous Ten-Mile Range. The railroad loped easily down one fork of the Blue and up the other fork for nearly 20 miles before starting the climb over 11,320-foot Fremont Pass to regain the Atlantic side of the Divide and reach Leadville. The short line to Leadville, yes; but it climbed over three high passes to get there.

Back at Como, the line toward Gunnison (which was at first the main line of the South Park) struck southward along the comparatively level country of the valley and finally crossed the Park Range into the Arkansas Valley at low (9460-foot) Trout Creek Pass [also used by the Colorado Midland; see May 1943 TRAINS].

Here, at Buena Vista, 25 miles north of Salida on the Royal Gorge Route of the Denver & Rio Grande Western, lay an important source of tourist traffic. High on the eastern slope above Buena Vista, the Colorado Midland once ran. In the bottom of the valley is the Rio Grande main line, close by the river, which it follows from Pueblo almost to its source near Fremont Pass. Towering to the west is the high wall of the Continental Divide, featuring the College Peaks—Mount Harvard, Mount Yale and Mount Princeton—all more than 14,000 feet in height. It was just south of these peaks that the old South Park Line swung bravely west from the Arkansas Valley to climb the canyon of Chalk

Below is a picnic crowd of years ago arriving via DSP&P at Dome Rock in the Platte Canyon.

L. C. McClure, 2128 Glenarm Pl., Denver, Colo.

Creek through St. Elmo* to Alpine Pass, scenic highlight and operating headache of the South Park. The ride over this summit to Gunnison was probably unequaled. The train wound around the base of the mountains, climbing ever toward the top, until it crossed under the Divide through Alpine Tunnel. From the west end of the tunnel it emerged onto the beautiful Palisades, a shelf carved along the edge of a sheer granite cliff. This engineering made passengers' spines tingle with awe. Construction through here cost the railroad as much as $100,000 per mile. Downward it wound its way along the valley of Quartz Creek until it met the Rio Grande's Marshall Pass line, which it paralleled into Gunnison.

Probably the best-known trains ever to run over this road were the fish trains, which were inaugurated in the '90's. Fish train No. 75 ran out of Denver daily except Sunday at 5 p. m., going as far as Grant; and on Saturday there was still another, No. 73, at 2:05 p. m. Through the Platte Canyon, trout-fishing was good, and available right off the ends of the railroad ties. Outbound, the fisherman would pick his spot and ask the conductor to stop the train. By early next morning, his creel full of choice Rocky Mountain trout, the fisherman had but to get up from the end of the tie at the sound of the approaching train, and wave his handkerchief for the inbound fish train to stop. These trains often ran in two or three sections.

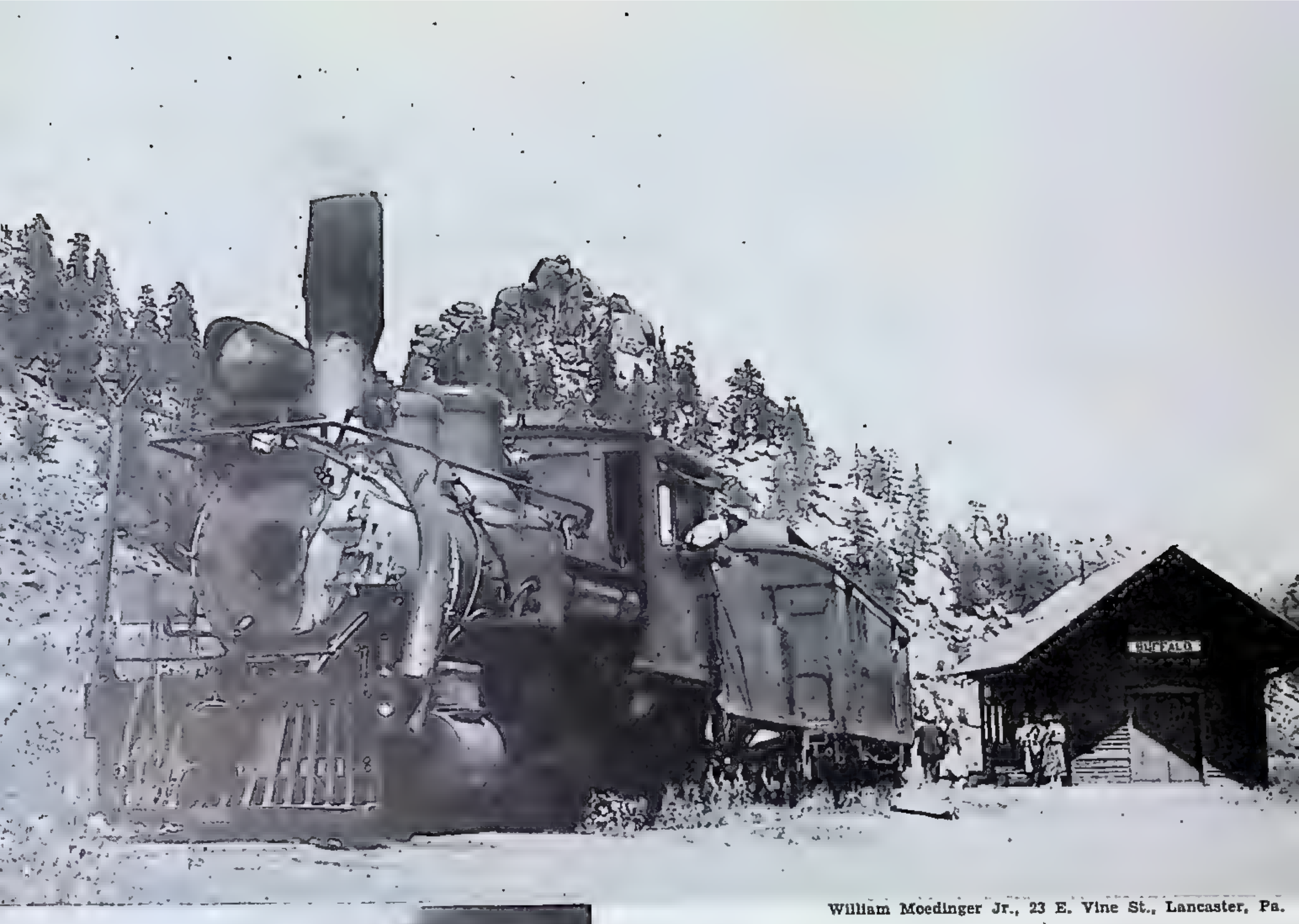
The regular train service in the big years included a day-train to Leadville and a night-train splitting at Como for both Leadville and Gunnison. Both dining-cars and sleepers were operated. The usual train to Como was as much as five cars, but beyond the junction only three cars could be handled.

In the late '70's, when the end of track was nearing Kenosha Hill, the departure of the morning passenger train from the little station in West Denver was a busy and colorful scene. Many of the passengers were miners, and almost all carried cumbersome bundles of everything up to complete prospecting outfits. Just before train time a carriage was likely to come dashing up with a Personage, perhaps the editor of the *Rocky Mountain News* or vice-president W. A. Chessman on an inspection trip. The con-

* "The Western stage line runs daily stages from St. Elmo to Aspen and Glenwood Springs in connection with through-sleepers from Denver to St. Elmo."—*Old timetable.*

In Platte Canyon. Following the route of the fish trains of a generation ago is this Leadville-bound freight of the middle '30's climbing the Platte Canyon below Grant, Colo.

R. H. Kindig.



William Moedinger Jr., 23 E. Vine St., Lancaster, Pa.

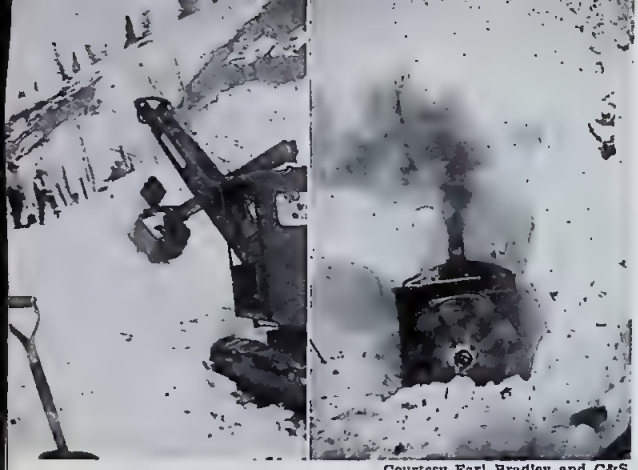
Above is the last passenger train, stopping at Buffalo on April 10, 1937. When that train reached Denver the old South Park was officially abandoned. At left is a South Park train in Denver Union Station, the desolate Como of today, and a narrow-gauge freight.

L. C. McClure.
L. H. Westcott.
R. H. Kindig.

ductor knew them all. "Good morning, Mr. Wood," he would say to the eminent Leadville miner and metalurgist. "No need to hurry. Plenty of time." The passenger equipment included several reconditioned secondhand coaches from the New York Elevated. [This sounds like 1943!—*Ed.*]

The little Mason bogies which pulled the first trains were soon replaced by some fine little Cooke Moguls, and by the turn of the century the road was using some 62 engines, including quite an array of Consolidations.

THIS, then, was the Denver, South Park & Pacific, later more aptly renamed the Denver, Leadville & Gunnison. In the beginning, as with most railroads, the idea was vastly different. The road was incorporated March 9, 1872, as the Denver, Georgetown & Utah. The intention was to build southwest from Denver to Morrison and then northwest past booming Georgetown and the Clear Creek Canyon, over Berthoud Pass, and then to follow the



Courtesy Earl Bradley and C&S.

Sometimes a steam shovel was needed to dig out snow slides so the rotary could get through! These slides came tearing down the mountainside, rolling up trees and boulders until the mess they left across the tracks would ruin or stall the toughest snow-cutting blades.

Colorado River to Utah. A branch was proposed to go by way of the South Park to Buena Vista and the Gunnison coal fields. But W. A. H. Loveland almost immediately pushed a narrow-gauge extension of his Colorado Central up Clear Creek Canyon toward Georgetown, planning to cross the Divide at Loveland Pass with an extraordinary bucket-and-tram system. The financial panic, Loveland's extension and withdrawal of promised Kansas Pacific aid caused an abandonment of the South Park's Georgetown idea and a reorganization of the corporation as the Denver, South Park & Pacific. The western terminal was then set at Fairplay, on the Arkansas,* where many wagon trails met.

The South Park road was the dream and realization of Governor John Evans, first president of the company—a great railroad builder and Denver booster, and the second territorial governor of Colorado. Among the original directors was a slim, far-seeing New-York-born man who, as treasurer of the Denver Pacific, was already leaving his impress upon the railroads of Colorado. His name was David H. Moffat Jr., and he was later to become one of the great men of Western railroading.

The line was completed to Morrison Springs, 16 miles from Denver, by June 23, 1874. On the first of the following year the directors issued their first annual report. In the typical style of first annual reports, it was sublimely optimistic: "It is believed that no route for a railroad of 150 miles in extent in this country has ever offered such abundant sources of local business throughout its entire route." Among the mentioned sources of potential traffic were suburban business ["Denver businessmen will wish to live along the line away from the dirt and grime of the city"]; lime, made from limestone deposits along the line; coal; sandstone for building purposes; timber—and here the report went into considerable detail—including ties for use of the line and other railroads; trout fishing; salt; silver; lead; gold; iron; galena; corn, hay, and other farm products; machinery; merchandise; and pleasure travel.

Since the proposed line had nothing but wagon roads for competition, and any kind of a railroad could better the wagon haulage costs, the estimates of revenue were based not on comparable railroad rates in other locations but rather on the cost of producing materials along the line compared with the selling price of similar materials in Denver. The road expected to be able to absorb most of the difference in freight charges. Using this naive basis and assuming that the road could furnish most of the lumber, most of the railroad ties, and much of the stone, coal and other materials for Denver, an original estimate of annual revenue along the line for the first division to Buffalo Creek was prophesied as follows:

Lumber	$98,000
Merchandise, coal, coke, machinery, etc.	45,840
Ores, bullion	12,000
Mail and express	5,760
Passenger fares	54,000
Total	$215,600

After setting up this estimate of gross revenue, the directors proceeded to say that their operating costs would be low because most of the traffic was in the downgrade direction, and hence they should be able to haul this traffic for a cost of only 40 per cent of the revenue, for an annual net profit of $135,360! The actual earnings on the first 16 miles of line in the third quarter of 1874 were $1511.82 net. This, in itself, wasn't bad for a beginning. The road had eked out this income by such ingenious traffic solicitation as hauling Sunday-school excursions to Morrison Springs, and it had earned itself the nickname of "Sunday-School Route."

The success of the Denver & Rio Grande was quoted as proof for the practicability of using the narrow gauge. This was at the height of the

Scenic and engineering marvel of the old South Park were the Palisades west of Alpine Tunnel. The large photo shows the line when it was still in service; the inset, today. Notice the track doubling back far below in the valley.

* Quoted from first annual report. Actually, the Park Range is *between* Fairplay and the Arkansas.

Otto C. Perry, 74 S. Elati, Denver, Colo.

L. O. McClure.

narrow-gauge boom. In the 1870's many a railroad thought that if the Rio Grande could scale the Rockies with narrow gauge, narrow gauge could do anything, and by 1879 there was a total of 4188 miles of narrow-gauge railroad in 34 states.

The directors aggressively solicited business, especially immigration to points on the line; and annual passes were offered to new settlers. Still the railroad didn't go forward. Capital was lacking, and even the supreme energies of Governor Evans could not secure the wherewithall to extend into South Platte Canyon and the mountains.

The beginning of the Leadville silver boom in 1877 changed all this. The embryo road had a goal offering rich traffic for any railroad which could connect it with Denver. The Rio Grande tried to get into South Platte Canyon first in order to build itself a shortcut to boomtown Leadville; but just when things seemed darkest for the South Park and Governor Evans had been asked to resign because of his inability to get capital, he disappeared and later turned up with a carload of rails and the announcement that more were on the way from the East. He had secured a loan from a Cincinnati bank, and the South Park started up the canyon which it was to occupy exclusively for 60 years to come. By 1878 the rail head had reached Bailey's, within economical wagon-hauling distance of Leadville, and a considerable portion of the Leadville traffic started to flow over South Park rails. This ended the road's financial difficulties.

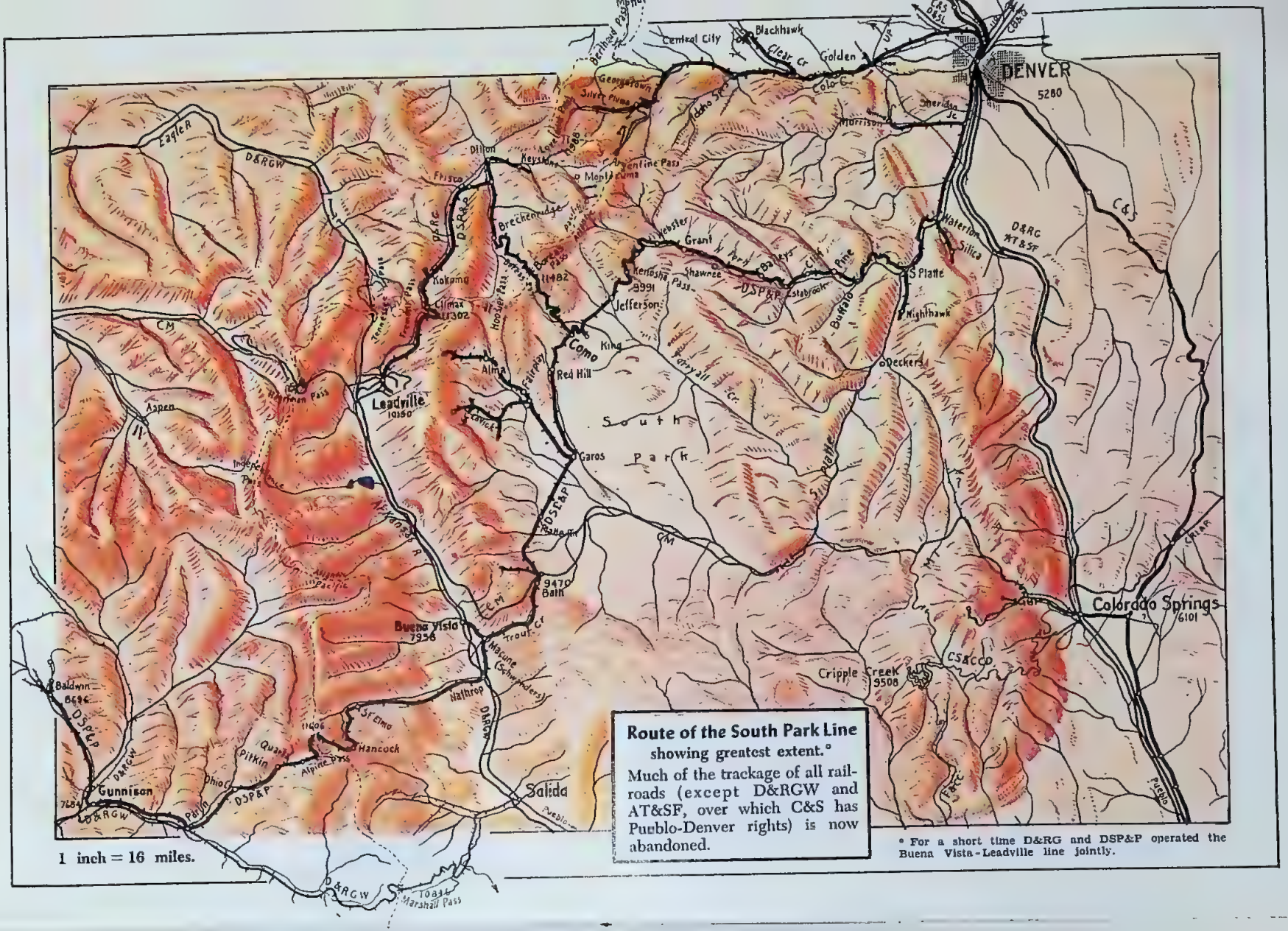
Governor Evans was right on the job, riding up and down the right of way on horseback and traveling the trains over the finished portions. Colonel C. W. Fisher, onetime general superintendent of the South Park, tells the story of an inspection trip with Evans: The two were riding on the cow catcher of a locomotive, just above Bailey's. As they rounded a curve both men saw a girl on the track. It was too late to signal the engineer to stop. Evans calmly let himself down to the bottom brace of the pilot, holding on to the link coupler with one hand, and with the other hand he pushed the girl off the track, out of the way of the locomotive. He then pulled himself up and reassumed his place on top of the cow catcher and continued his conversation with Fisher.

On February 10, 1880, the road reached the Arkansas River and ran a line into Buena Vista from which it intended to branch north up the Arkansas Valley to Leadville. The main line was continued west over Alpine Pass in 1880 and into Gunnison by 1882.

It was in the late '70's that a new but familiar figure entered the story, just as he did most railroad stories at about that time. The first narrow-gauge sleeper out of Denver had come west over the line, and from the platform stepped Jay Gould, his black derby firmly set on his ample cranium and his fine full beard neatly trimmed. He made a cash offer for an interest in the South Park, and though at first turned down he soon had an interest in not only the South Park but also the Rio Grande, which built into Buena Vista a short time later. Gould fathered a permanent joint-ownership and pooling arrangement for the present Rio Grande track between Buena Vista and Leadville. The South Park, under this arrangement, was assigned 40 per cent of all freight traffic between Leadville and Denver. Additional Leadville business also flowed to the South Park by wagon train over the direct route to Como and then via railroad to Denver. It was in those palmy days that the South Park averaged $10,000 a day, making even the rosiest prophecies of its founders sound like old-fashioned peanuts.

From the cab, last run of the narrow-gauge.

A. C. Kalmbach.

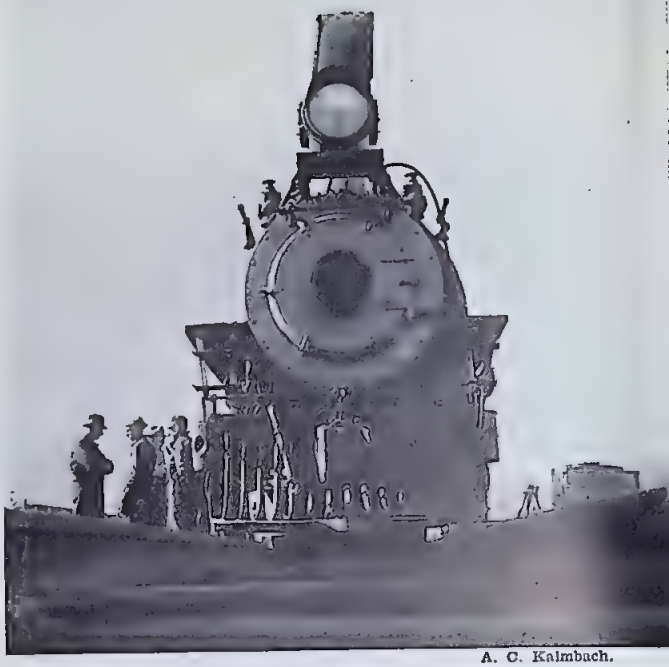


Route of the South Park Line
showing greatest extent.*

Much of the trackage of all railroads (except D&RGW and AT&SF, over which C&S has Pueblo-Denver rights) is now abandoned.

1 inch = 16 miles.

* For a short time D&RG and DSP&P operated the Buena Vista-Leadville line jointly.



A. C. Kalmbach.

Narrow-gauge Consolidation No. 76, which pulled the last narrow-gauge train on the old South Park, is shown at Leadville.

But Jay Gould was not content with only the revenues from the railroad. He had bigger schemes. Perhaps he planned to compete with the Union Pacific and perhaps he didn't, but at any rate he made it look as if he were going to join his Kansas Pacific and the South Park into a transcontinental line roughly paralleling the Union Pacific. The UP became alarmed and in 1880 bought the Gould interests in the Kansas Pacific, the Denver Pacific, and the Denver, South Park & Pacific.

First act of the new owners was to cancel the perpetual joint-interest in the Buena Vista-Leadville line and to substitute for it a trackage lease agreement which was cancelable by either party on six months' notice. General Palmer of the Rio Grande waited only until the next day to serve his six months' notice of cancellation of the lease. The South Park was thus deprived of its entrance into the fruitful Leadville territory, and the only course was to build its own line. Construction was begun almost immediately on the roundabout line from Como over Boreas Pass and Fremont Pass, and this trackage reached Leadville in 1884. Because of the heavy grades, the South Park could never again successfully compete on a profitable basis for the Leadville traffic.

Not only did the South Park increase its operating costs into Leadville, but the traffic itself began gradually to fade away. The fortunes of all the Colorado narrow-gauge railroads have always been inextricably bound up with the mines. The big smelters were originally at Denver; but smelters and reduction mills were later built close to the mines, reducing the transportation of ore. The South Park started to lose money—first a little, then more—until the bonds were in default; and in 1889 the road was sold to another Union Pacific subsidiary, the Denver, Leadville & Gunnison. This, in turn, went into receivership in 1894 and was acquired by the Colorado & Southern in 1898, along with the Clear Creek Canyon narrow-gauge lines of the Colorado Central. It was shortly thereafter that the Colorado & Southern acquired a half interest in the Colorado Midland, and the South Park line had its last chance to become part of a real transcontinental routing. There were plans afoot to use the Colorado & Southern line down into South Park as a Colorado Midland shortcut from Denver, to standard-gauge it and to connect it up with the Midland west over Hagerman Pass and into the valley of the Colorado. This fell through, and the South Park continued its way as a division of the C&S, which was in turn acquired by the Chicago, Burlington & Quincy in 1908.

The first important shrinkage in mileage came in 1910, when serious cave-ins in the Alpine Tunnel and washouts along Trout Creek made it necessary to discontinue through-service between Garos (just south of Como) and Gunnison. A short portion of the line below Buena Vista was operated independently until 1926, and the D&RGW operated a portion of the line west of the Alpine Tunnel until the same year, but the old South Park was through as an artery of traffic to Gunnison.

It was pre-ordained that the Gunnison line would be the first to go, because the operating expenses over Alpine Pass were tremendous, and the Gunnison traffic, like that of Leadville, was subject to D&RGW competition. While operating expenses on normal narrow-gauge lines are roundly three times as much as on standard-gauge, the operating expenses over Alpine Pass were probably five times as great.

The trains have not gone through the tunnel for 33 years, but hundreds of railfans still make annual pilgrimages to the spot, looking for old

spikes or pieces of Union Pacific rail which they carry off as souvenirs. The enginemen of a generation ago would have grunted disgustedly at such goings-on. To them, Alpine Tunnel was but an incident in getting the trains over the division—a big incident, to be sure, and sometimes a troublesome one. Often an engineer on a train up from Gunnison confidently cut off the helper at the west end of the tunnel, went on alone in seemingly good weather, and found fast-drifting snow when he emerged from the east portal. Many a train got stuck near Alpine Pass. This was costly to the management, but it undoubtedly added to the romantic aura which today hangs about the place.

The Leadville line, in spite of earlier abandonment petitions, continued in service until the last train left Leadville for Denver on April 10, 1937. In 1931, at the time of an earlier abandonment petition, the C&S offered to give the Leadville line to Victor A. Miller, who has made such a success of operating the Rio Grande Southern on slim revenue. Miller proposed to operate daily motor trains similar to the famous *Galloping Geese* of the RGS, homemade from handcar parts and Pierce Arrow autos. Towns along the line objected violently. They felt they had better chances of keeping an unprofitable line in operation if it were owned by a big corporation than if it were owned by an individual. Perhaps they were right temporarily; but the line is gone now, and who knows but what Miller, with the ingenious methods and the freedom of action which only an individual can attain, might have made a success of the old South Park?

A. C. Kalmbach.

After the abandonment of service in 1937, attempts were made to organize a local company to take over; but the offer to give the road away no longer held. The price of junk was too high. The South Park Railroad Company was organized on April 14, 1937, and the district court of Leadville awarded it temporary possession of the line between Fremont Pass and Waterton, almost to Denver. Seven engines at Leadville were supposed to return to Denver on April 14 with most of the cars, but the railroad held them because beyond Climax they would be in no-man's-land, and the Summit County sheriff threatened to stop the returning rolling stock.

By May, 1938, all of the legal entanglements had been cleared up, however, and the junking began. All that remained were the small section from Denver to Waterton, which has since been standard-gauged, and the 14-mile two per cent grade from Leadville to the molybdenum mines at Climax, atop Fremont Pass. It is this 14-mile grade at Climax which has just been standard-gauged, ending the history of the narrow-gauge South Park. The conversion not only allows one engine instead of two to handle the traffic to Climax, but it saves the expense of reloading all freight from standard- to narrow-gauge cars at Leadville. This traffic, incidentally, is mostly upgrade—food, coal, and other supplies for the mines. This again illustrates that trend of mining which has taken away so much of the traffic which formerly kept the Colorado narrow-gauges busy and prosperous: If all of the molybdenum ore were shipped via railroad to reduction mills, it would be 18,000 tons a day of traffic; but as it is, the reduction mills straddle the Continental Divide right in front of the mines, and a few box cars a day carry the molybdenum concentrate down to the main line in barrels.

The Denver, South Park & Pacific lives only as 14 miles of grade occupied by standard-gauge rails. The heavy Consolidation locomotives pulling the freight up to the Climax mine are quite different from the little Mason bogies which hauled the Sunday-school specials from Denver to Morrison Springs nearly 70 years ago.

The end of the South Park. The caboose of the last narrow-gauge train swings over a three-rail switch into Leadville.

The Daniel Nason was built in 1856 for the old Boston & Providence, and was exhibited at the New York World's Fair by the New Haven. The J. W. Bowker (right) was an old-timer on the famous Western mining road, Virginia & Truckee.

★ Intimate biographies of famous old locomotives exhibited at the New York Fair.

A Parade of the Iron Horse

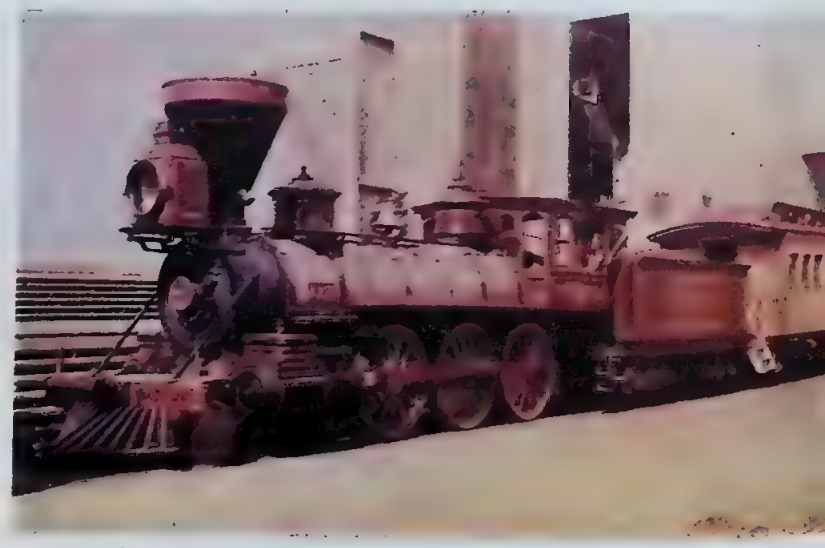
By Edward Hungerford.

A BRAVE company they are, these little fellows of the long-agos. Not iron horses—*colts*. Time was when things were far different. In that day these were great big engines. Back in 1863, when Master Mechanic Thatcher Perkins, of the Baltimore & Ohio, built the six-drivered *Thatcher Perkins* (in those days it was not named after him), the road suddenly discovered that its track was not heavy enough for the 45-ton monster, and so he was tied up in Mount Clare shops in Baltimore until the roadbed could be rebuilt and made properly fit for him. Thatcher Perkins, who was considerably ahead of his time as a locomotive designer, saw the inconvenience and expense of double-heading the heavy B&O trains over the 2.2 per cent grades of the Alleghenies between Piedmont and Grafton, and so he brought this first of his Ten-Wheelers into existence.

Baltimore & Ohio, pioneer railroad of America, gave early attention to its motive power. Back in the 1820's it was dispatching a commission to England to see the beginnings of the steam locomotive over there. The B&O had begun with horses. Ross Winans came to the road almost at the outset, to buy the equines to haul its earliest trains, and ended by becoming a locomotive and car builder of the first water, building not only for the railroads of the United States but also, through his sons, for that remarkable pioneer railway that Czar Nicholas I, of the Russias, built from St. Petersburg to Moscow away back in the 1840's.

THE grasshopper *Atlantic* was the first *standard*-type locomotive of any sort for Baltimore & Ohio. It was built by Phineas Davis of York, Pa., whose earlier locomotive, the *York*, in 1831 won a prize of $4000 offered by the directors of the pioneer railroad in a competition held in the outskirts of Baltimore. The *Atlantic*, a far superior engine—0-2-2 type and having a tractive power of 4245 pounds—came along the following year. Despite the awkwardness of its design, vertical cylinders and other features, it was from the beginning a practical engine. From that day to this—111 years—Baltimore & Ohio has kept the *Atlantic* in perfect working condition. It is almost as sound as the character

B&O's 117 was renamed Thatcher Perkins to honor an early master mechanic.



All photos by courtesy Gulf Oil Company.

of the road. It has appeared at most of the great expositions held in America in the last half century —at many of them, marching bravely under its own power. The picture of it on page 21 was made at the *Railroads on Parade* pageant at the New York World's Fair of 1939-40. The little double-decker coaches that the *Atlantic* hauls are faithful reproductions of original coaches built by Richard Imlay for the Baltimore & Ohio 110 years ago, and reproduced for the road's centennial, The *Fair of the Iron Horse*, in 1927.

FIRST six-wheeled locomotive on the B&O was the *Lafayette*, built for the road in 1837 by Richard Norris of Philadelphia. The original engine disappeared many years ago, but it was reproduced in exact detail, from the original drawings, for the *Fair of the Iron Horse*. The reproduction was named the *William Galloway* (page 21) in honor of an early engineer of the road who drove its first train into Washington.

This graceful locomotive, with its tremendously high smokestack and its single pair of driving wheels, was a distinct forerunner of the steam locomotive in use today upon our railroads. It actually had less tractive power than the *Atlantic*. Despite a weight of 41,240 pounds (with tender) and a boiler pressure of 90 pounds, it had a tractive power of but 2323 pounds—which probably was the reason why the original Lafayette did not long remain in service. Pulling power began to count, even then.

THE *William Mason*, shown on page 21, is a very fine example of the so-called American-type

The William Crooks traveled under its own power from St. Paul to the Fair.

The locomotive which played the role of the Central Pacific's Jupiter in the World's Fair gold-spike scene was recreated from an old Virginia & Truckee Eight-Wheeler. The Best Friend of Charleston (center, above) was the first American-built locomotive, constructed in 1829 by the West Point Foundry of New York for the South Carolina Railroad. The Tom Thumb, with its rifle-barrel flues, convinced the B&O directors that steam was better than horses. It was built by Peter Cooper in 1829.

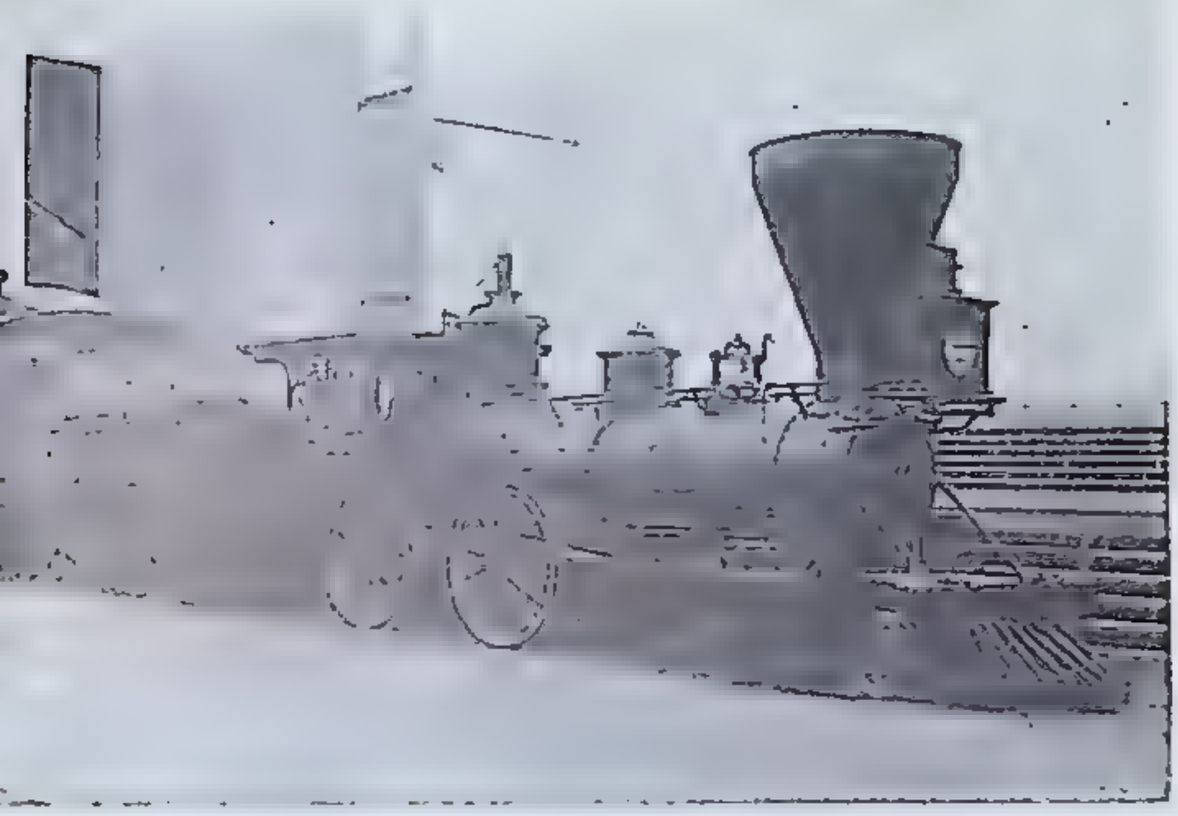
passenger locomotive—4-4-0—that came into wide use upon the railroads of the country about the middle of the last century. William Mason, a master locomotive builder, built this engine in 1856 at his famous shop at Taunton, Mass., and he was proud of the fact that his 28-ton engine could develop all of 6225 pounds tractive power. But he was even more proud of its graceful lines and its "wagon-top" boiler. It was perhaps the first attempt at streamlining a locomotive. For its centennial party in Baltimore in 1927, the Baltimore & Ohio christened it the *William Mason*, after its distinguished builder.

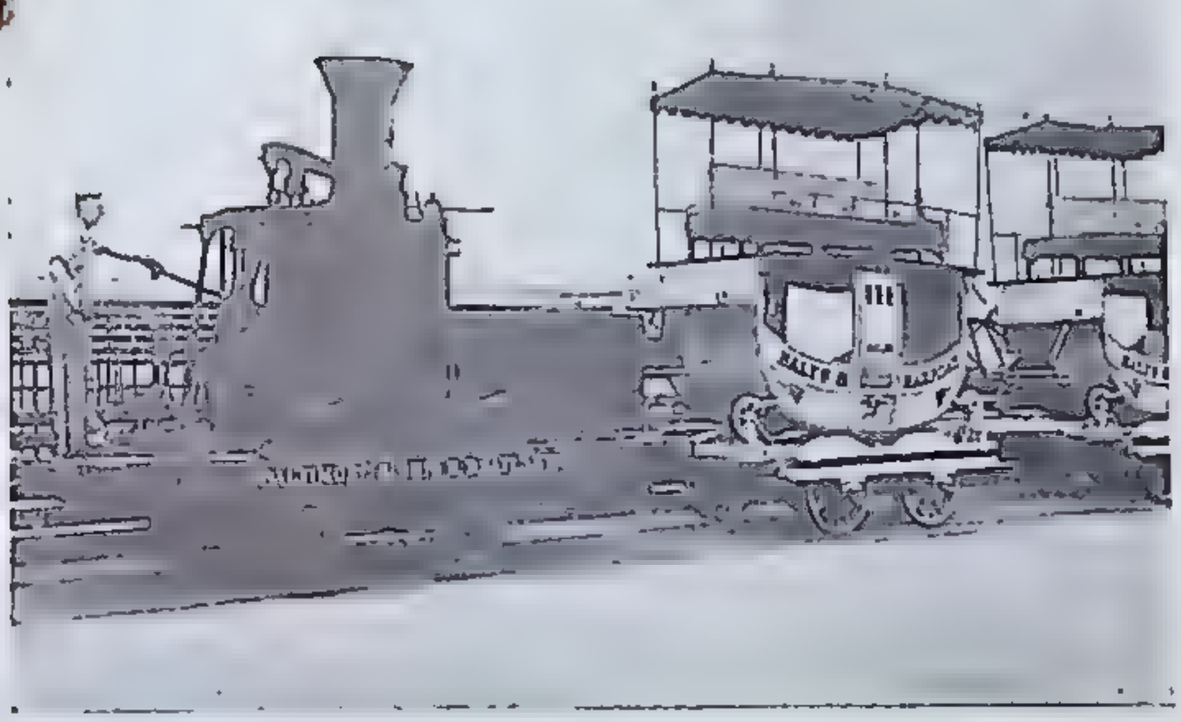
A CONTEMPORARY of the *William Mason* is the inside-connected 4-4-0 *Daniel Nason* (the similarity in the names is a bit confusing) built for the proud old Boston & Providence Railroad in 1856 by George S. Griggs, its master mechanic, in the onetime shops of the B&P at Roxbury, Mass., a suburb of Boston. The *Nason*, shown in the photo at the top of page 18, was named for a very famous sea captain from the state of Maine. For years it stood rusting, neglected and obscure, in a sheet-iron shed at Purdue University. From this predicament it was rescued, in 1938, by the New York, New Haven & Hartford, successor to the erstwhile Boston & Providence; was carefully restored—although not to running condition—and repainted, and was shown in the yard of *Railroads on Parade* at the New York Fair.

THE *William Crooks*, 4-4-0 contemporary of the *William Mason* and *Daniel Nason*, has never been neglected—not for one moment. Built in 1861 in the shops of Smith & Jackson (the New Jersey Locomotive & Machine Works) in the well famed locomotive-building town of Paterson, N. J., the engine was the pet possession of the late James J. Hill, who saw to it that it was carefully preserved as a particularly fine specimen of the breed of early iron horse. It was built for the St. Paul & Pacific Railway, which afterwards became a part of Jim Hill's Great Northern; was shipped by rail to LaCrosse, Wis., thence on a barge up the Mississippi River to St. Paul, where it arrived September 9, 1861. The following Spring it went into service between St. Paul and St. Anthony (the present city of Minneapolis), 10 miles distant. Seventy-nine years later it again moved triumphantly, under its own steam, for 1500 miles from St. Paul to the New York Fair. At its birthplace—Paterson—it was accorded a civic reception, well worth so distinguished a locomotive.

The *William Crooks* is a 4-4-0 type with a tractive power of 4700 pounds, and weighs, with its tender, 51 tons. It is shown on page 19.

STILL another 4-4-0 of the once highly popular balloon-stacked type was the *Jupiter* (top, this page), who made his debut as an actor in my *Railroads on Parade* at the New York Fair. This was not the original *Jupiter* of the Central Pacific, which played so important a role in the





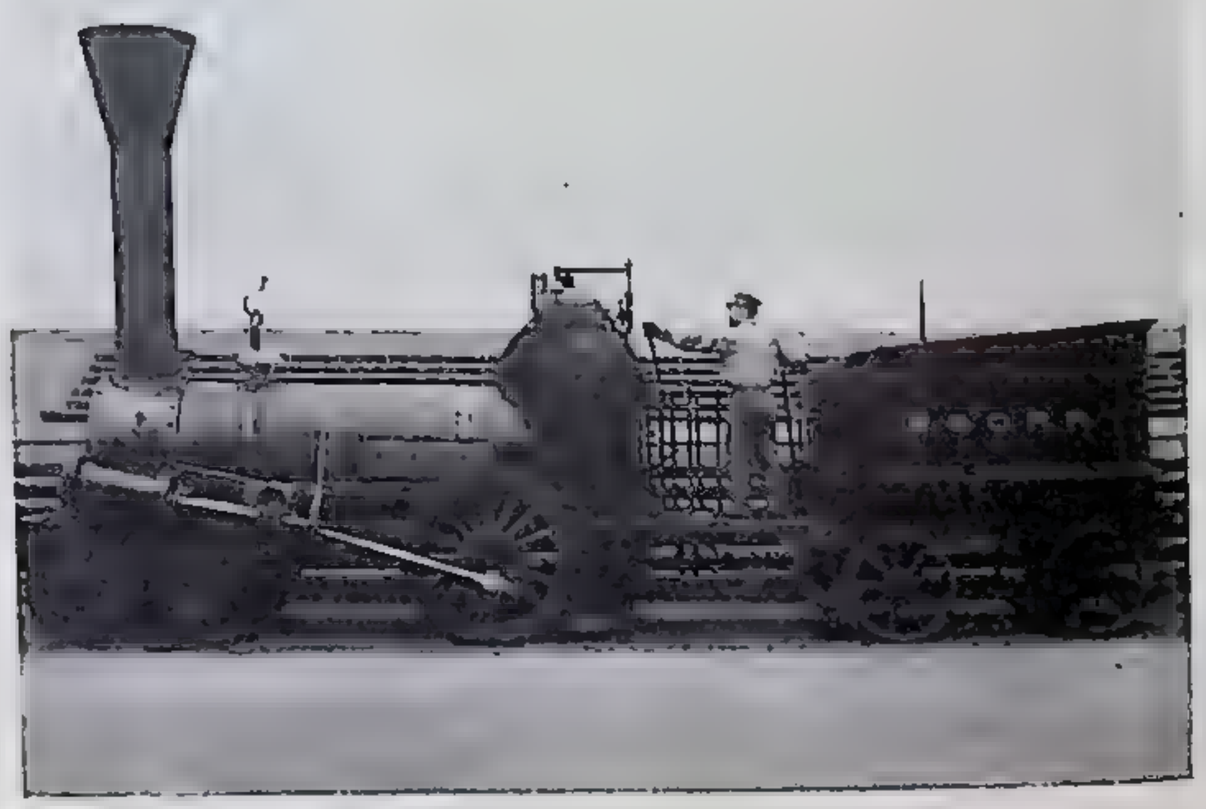
Pride of the Prairies (top) was the queerest locomotive at the Fair, carrying its rightful Burlington personality on one side and repainted to represent UP's 119 (gold-spike scene) on the other. The other three are B&O old-timers: the American Standard William Mason; the Atlantic, first steam locomotive to enter Washington City; and the William Galloway (lower right), which has been seen in action in several movies.

driving of the golden spike at the completion of the first transcontinental railroad at Promontory, Utah. That engine disappeared years ago. This engine, Baldwin-built, actually was two years younger. I found him, just before the Fair, in a dusty corner of the old stone enginehouse of the Virginia & Truckee Railroad at Carson City, Nev., where he sat as No. 12, the *Genoa*, of that road. The *Genoa* had not turned a wheel since 1905, but he still was in excellent running condition. We restored his original big smokestack and square headlight, renamed him the *Jupiter* of the glamorous Central Pacific, and shipped him East on a flat car to the shops of the New Haven road in upper New York City, where presently he was repainted and made ready for his role in *Railroads on Parade*, never missing one performance and not suffering a breakdown of any sort—which was pretty good, after 34 years of idleness. At the moment he is in retirement in a barn up in western New York, safe from the scrap-metal hounds.

WITH the *Jupiter* there traveled East another old Virginia & Truckee locomotive, the small *J. W. Bowker* (page 19), built in 1875. The *J. W. Bowker* in his day hauled millions of dollars in gold ore from the rich mines of the Comstock Lode at Virginia City, down to Reno, where connection was made with the Central Pacific. His distinctive feature is the pump atop his boiler—of great use and effectiveness in extinguishing fires anywhere along the line of the railroad. The *Bowker* was taken West again after the New York Fair and is at present stored with two small narrow-gauge locomotives in a shed at Berkeley, Calif.

THE final engine of the group is another *Railroads on Parade* actor, old No. 35, *The Pride of the Prairies*, built in 1882 for the Burlington & Missouri River Railroad, now a part of the Chicago, Burlington & Quincy system. It was nearly a counterpart of the 119 of the Union Pacific, which, with the *Jupiter*, performed the original golden-spike scene there at Promontory, in 1869. The Union Pacific could not, or did not, furnish a locomotive for this scene in the pageant; its distinguished competitor, the Burlington, made good the deficiency by generously loaning the *Pride of the Prairies*. For two years this was the only locomotive in the world with the names of two different railroads on opposite sides of its tender. One side bore the cognomen of the Union Pacific; the other, that of the Burlington. Two-faced Janus was not in it with that engine. The only thing comparable with it was our Pullman car in the pageant, which was labeled *Luxuryland* on one side and bore its original name, *Claymont*, on the other. When it traveled between Chicago and New York it caused unending confusion among the yardmasters at the passenger terminals; their records depended upon which side they first saw the car.

ALL of these engines, and many oldsters, are being preserved carefully. Some day they again will emerge—it is to be hoped, as part of that national museum-of-the-railroad which still is in embryo and which must so remain throughout the duration.



From the Southland.

This Chicago & Eastern Illinois passenger train was photographed under the floodlights at Yard Center, Ill., main freight yard south of Chicago. Dixie Route trains from Florida and New Orleans come over the C&EI from the Ohio River at Evansville, Ind.

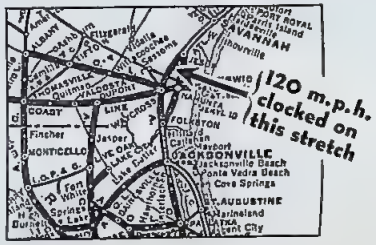
M. T. Hadfield; courtesy Chicago & Eastern Illinois.

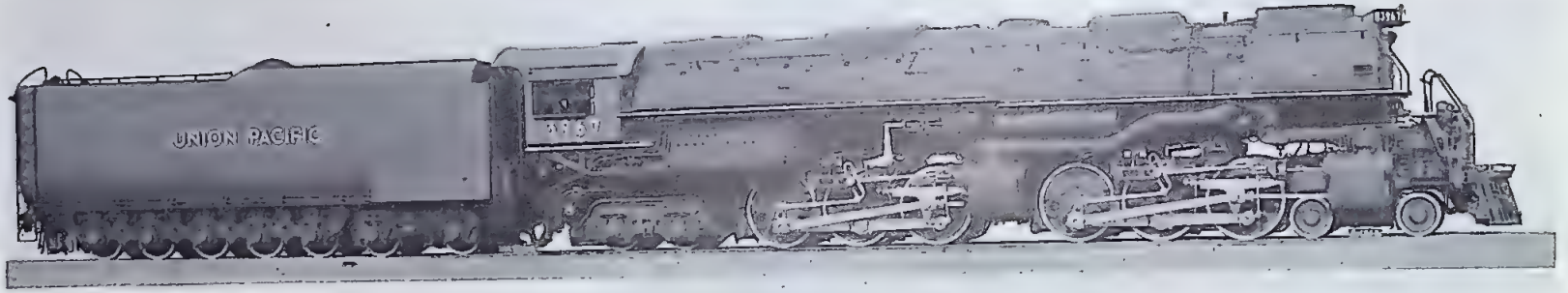
Courtesy Atlantic Coast Line.

Fast-Stepping Ten-Wheeler

Into every discussion of railroad speed records creeps the almost legendary story of an Atlantic Coast Line mail train which made a record speed of 120 miles an hour back around the turn of the century. The details of that incident have finally been uncovered and the story need no longer be legendary. The locomotive was a Ten-Wheeler, Plant System 111, later renumbered ACL 210 as shown in the photograph, and just recently scrapped to aid the war effort. Since the original train-sheet covering the run was destroyed by fire some years ago, the details of the run are recited in this affidavit by D. S. McClellan, ACL dispatcher at Waycross, Ga.:

"It was in the month of March, 1901," says the affidavit, which is made in the proper legal form and before a notary, "and the run was made on Plant System engine No. 111 driven by Albert Lodge, engineer. At Fleming, Ga., Engine 111 was exchanged for No. 107, which was running hot. The train arrived at Jesup about daylight, remaining there three minutes taking water and oiling the engine. When the train was about two or three miles from Screven, Ga., Jimmy Ambrose, the traveling engineer riding with me in the fireman's seat, said, 'This train is going at an awful rate of speed.' I replied, 'We will time it from Screven to 74-Mile Siding.' This distance was five miles, 3½ miles being downhill. We took out our watches and made a check of the speed and this train made the run from Screven, Ga., to 74-Mile Siding (now known as Satilla), a distance of five miles, in 2 minutes 30 seconds."





Union Pacific 4-6-6-4

Built by American, 1942

THE Challenger, or 4-6-6-4 simple articulated, type of locomotive originated in 1936 when the Union Pacific and the American Locomotive Company collaborated in designing this large-capacity, high-speed locomotive especially suited for either heavy passenger or fast freight work over rolling country. Union Pacific used its originator's prerogative and nicknamed the new type after its most popular train. That first order in 1936 included 15 locomotives, road numbers 3900-3914. In 1937 25 more of this type were received and numbered 3915-3939. The 20 additional which were built last year bear numbers from 3950 to 3969, and the 25 just recently delivered are numbered 3975 to 3999. The same freight trains which these 4-6-6-4's handle in more gentle country are taken over the Wasatch Mountains in Utah by the similar, but vastly more powerful, 4-8-8-4 "Big Boys" [July 1943 TRAINS].

Specifications:

Tractive force	97,350 lbs.
Cylinders, diameter and stroke	Four of 21" x 32"
Drivers, diameter	69"
Weight on drivers	404,000 lbs.
Weight on front truck	101,000 lbs.
Weight on trailing truck	122,000 lbs.
Total weight of engine	627,000 lbs.
Weight of tender (two-thirds loaded)	348,500 lbs.
Steam pressure	280 lbs.
Grate area	132.2 sq. ft.
Heating surface (evaporative)	4795 sq. ft.
Tender capacity	Coal, 28 tons; water, 25,000 gals.

Courtesy Union Pacific.

Broad Street's 1923 Fire

THE recent eight-alarm fire in the Pennsylvania Railroad's Broad Street Station, Philadelphia, recalls another Broad Street Station fire 20 years ago. Now old Broad Street Station is only one of the Pennsy's four principal stations in Philadelphia, and the temporary loss of its facilities was not too serious a blow in spite of wartime traffic. Only about one-fifth of all Pennsy trains serving Philadelphia originate or terminate in the old terminal facing the city hall. The others are divided between suburban trains operating into the new underground Broad Street suburban station next door; the through trains to New York from the West, which stop at North Philadelphia; and the through trains to Washington and the South, which make their principal Philadelphia stop at the new 30th Street Station on the west bank of the Schuylkill. The old terminal will eventually fade out of the picture entirely and the so-called Chinese Wall formed by its elevated track approach will be removed.

But 20 years ago the situation was different. Broad Street Station was the center of the heaviest passenger traffic on the Pennsylvania Railroad System and one of the three or four busiest passenger stations in the country. It accommodated 530 inbound and outbound trains each day, requiring 2217 distinct train and engine movements through the approach tracks. Over 80,000 passengers were brought in and out of the station daily, including a very large proportion of the city's commuting population. Stoppage of this vast traffic would be an emergency of the first magnitude.

Shortly before 1 o'clock on the morning of Monday, June 11, 1923, fire broke out in a room beneath one of the platforms of the vast arched trainshed. The flames spread with incredible rapidity, and within a few hours the entire

structure, with its 16 stub-end terminal tracks, nearly two miles in combined length, was reduced to ruins.

The fire, though brought under control at about noon, continued to burn more than two days. It was the most serious in Philadelphia for many years. Practically the city's entire fire-fighting force, with all available apparatus, was rushed to the scene.

Long before the fire had even gained full headway, arrangements were perfected to take care of the incoming morning trains at the company's other principal city stations—West and North Philadelphia—and to dispatch the outgoing trains from these stations and the West Philadelphia produce freight yard.

So well did this work out that all of the day's arriving trains were taken care of, with a minimum of inconvenience, and 39 out of every 40 scheduled trains in outbound service were operated from the stations named as dispatching points. The day following the fire every regular train, in and out of the city, was operated.

No sleeping-car nor through trains were annulled at any time. In fact, the only real curtailment of service was the doubling up of a few outbound locals during the early morning hours on the day of the fire.

Before daylight, and while the fire was still at its height, the construction of temporary facilities was started to bring the commuting trains back to the center of the city as quickly as possible. These facilities consisted of platforms, with wooden stairways to the street, from both sides of the elevated tracks. They were located a block beyond the outer end of

Until the Pennsylvania Railroad built its new 30th Street Station on the west bank of the Schuykill River, Broad Street Station in Philadelphia, facing on City Hall Square, was one of the country's great railroad stations. Its giant trainshed, spanning the 16 stub-end tracks, was likewise one of the country's great trainsheds in the old tradition. The fire in 1923, however, left only the twisted steel framework, and after the platform level had been rebuilt and trains were again using the station, six of the tracks were borrowed from active service and used

the train shed, to be out of reach of the heat and flames. Thirty-eight electric trains were operated to and from this temporary station on the day of the fire. The next day it was used by 142 electric trains.

The fire burned out all the floor and platforms under the train shed, including the ties that supported the rails. The heat and the settling of locomotives and cars twisted many of the steel girders that supported the floor, while all wood material in the roof above was also devastated.

As cooling permitted, the rebuilding of the platforms and tracks beneath the distorted steel skeleton of the roof arches was begun. On Wednesday, June 13, the first platform was completed from the outer end of the train shed to the concourse gates. This permitted passengers again to use the station facilities, ticket offices,

All photos by courtesy of Pennsylvania Railroad.

for the machinery which tore down the old steelwork. Umbrella sheds in the more modern style displaced the graceful old arch. Express and baggage facilities occupy the space beneath the platform level, and this added to the difficulty of restoring service, for the tracks and platforms are all constructed on steel bridgework, which was quite badly twisted. Nonetheless, all 16 tracks were back in use only seven days after the fire started. These photos show some stages in the work. Notice the fire-swept trains in the photos on page 28.

and regular exits and entrances. The full electric suburban service of 151 trains was brought to the outer end of the train shed on that day.

On the following day, Thursday, June 14, two tracks were completed all the way to the concourse gates. Progress thereafter was very rapid. Seven working days after the fire started, and five after it was declared "out," all 16 tracks had been fully rebuilt, the platform facilities completely restored, and approximately 70 per cent of all trains brought back into the station. The others continued to be handled at West Philadelphia, since six of the 16 tracks were needed for the machinery used in taking down the ruined framework of the old trainshed.

The train shed was never rebuilt, but was replaced by butterfly-type sheds of a more modern design. (See cover photograph.)

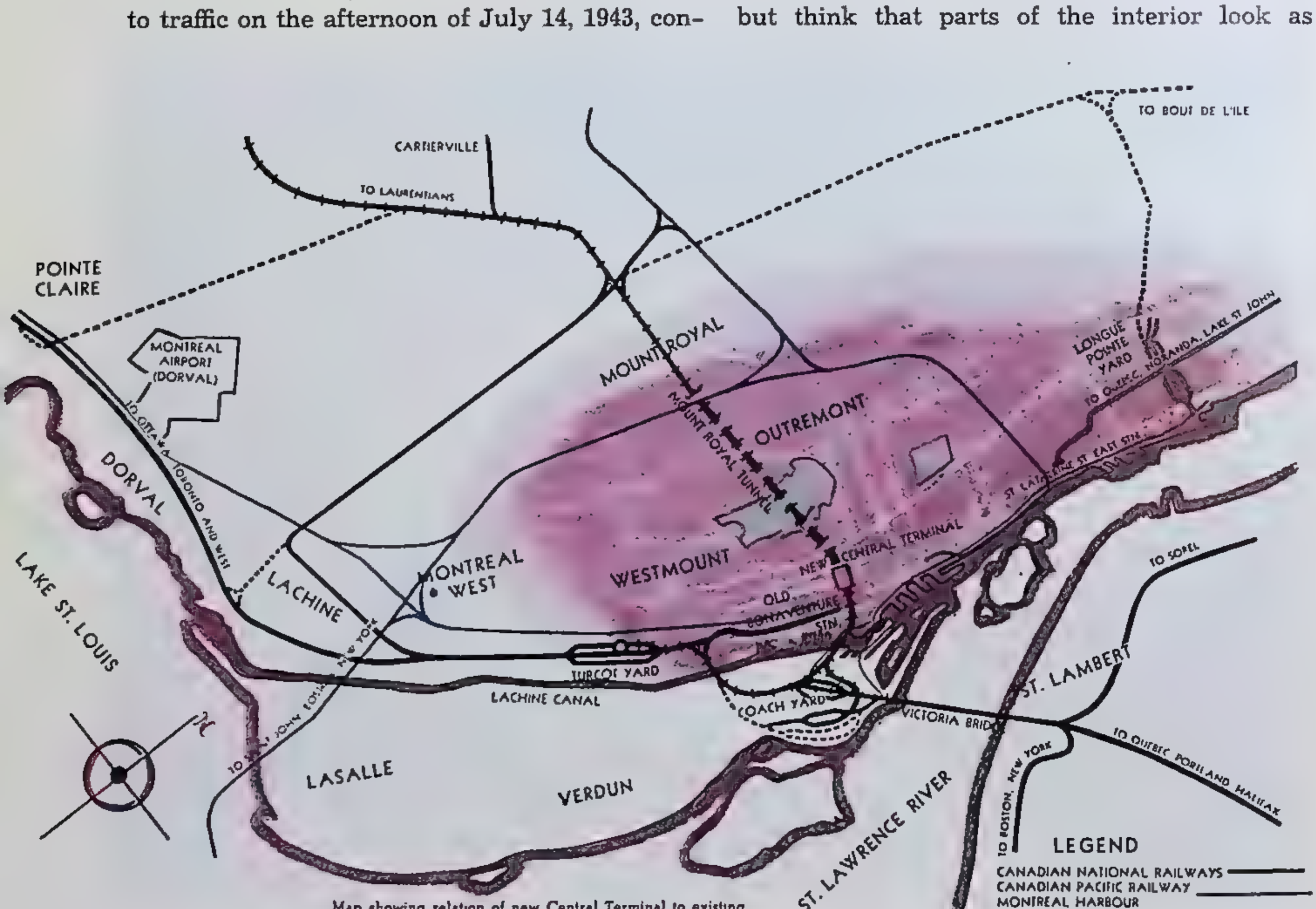
New Montreal Terminal

★ Modern, completely electrified 17-track structure replaces Canadian National's historic Bonaventure Station.

By W. A. B. Davidson.

A NEW city gateway, efficient, thoroughly modern and attractive, has been added to North American railroad facilities with the completion of the Canadian National Central Terminal in Montreal. This terminal will be used by practically all regular Canadian National trains entering and leaving Montreal, as well as by trains of the Rutland and the Central Vermont. It almost completely replaces historic Bonaventure Station, which is now used only by troop trains, special movements, and limited suburban service. Thus a dream which has been in the minds of both railway and city officials for nearly 50 years has been fulfilled. The new terminal, which was officially opened to traffic on the afternoon of July 14, 1943, contains office buildings directly over the tracks, and baggage, mail and express facilities directly underneath. It is completely electrified and includes 14 tracks for regular passenger service. Besides these are three auxiliary tracks—two to be used for storage, special events, etc., and one for mail and express. This compares with 11 tracks at the old Bonaventure Station; passenger-car capacity stands at 150, as against 81 at the old station.

Within the scope of the work it has to do, the new terminal has every good feature that any station boasts, together with a lot of special wrinkles that are entirely new to railroad stations in general. It is not as striking architecturally as the Canadian Pacific's Windsor Station in Montreal, and although one cannot help but think that parts of the interior look as



Map showing relation of new Central Terminal to existing and projected rail lines in Montreal and vicinity.

Courtesy Canadian National Railways.

if they had been prepared for the World's Fair, the fact remains that a railroad terminal station ranking with the best on the continent has been erected.

For years, passenger facilities of the Canadian National in Montreal had been in poor shape. The old Bonaventure never could be adjudged a work of art, and, mechanically speaking, it left much to be desired. The most obvious reason for the erection of the station, besides the pressing need for greatly improved all-around facilities, was to eliminate grade crossings in the downtown area of Montreal. With the opening of the station nearly 150 train movements a day over busy, congested streets of the city have been done away with.

For some 50 years, successive city councils, boards of trade, chambers of commerce, and whatnot, have been agitating, shouting and petitioning for the elimination of grade crossings and improvement of shipping facilities. Finally, 15 years ago this Autumn, a steam shovel lifted its first scoopful of earth out of the terminal site on Dorchester Street only to cease operations soon after with the advent of the depression. The plan, however, persisted, and was revived from time to time during recent years. Finally conditions seemed appropriate for its completion, and today the Canadian National Railways boast a modern building in the heart of Montreal's downtown area.

The new station is located on the site of the company's former Tunnel Station, which was originally the Canadian Northern's Montreal terminal before that road was taken over by the Canadian National shortly after the last war. This site is immediately south of the entrance to Mount Royal Tunnel and almost in a direct line between the tunnel and the Victoria Bridge over the St. Lawrence River. The level of the tracks at the southern end of the tunnel is about 40 feet below street level and at practically the same level as the tracks at the entrance to the Victoria Bridge across the St. Lawrence River.

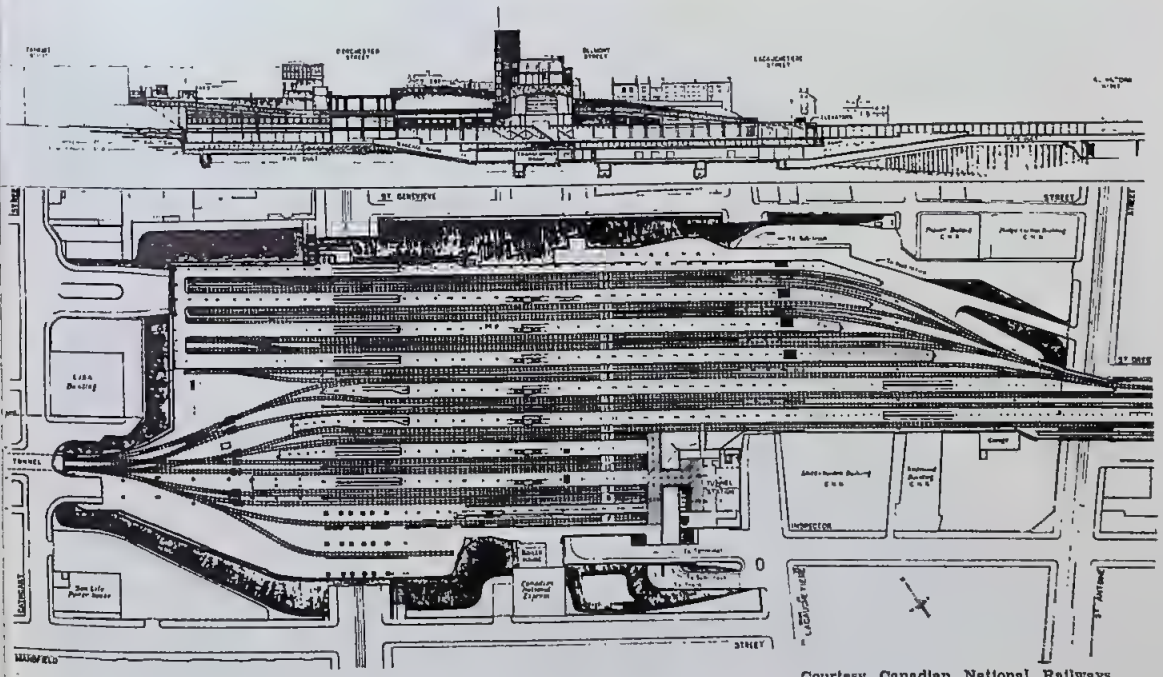
The main station building faces in a northerly direction near the Dorchester Street viaduct, which spans the tracks right in front of the sta-

Freight-car length.

Freight cars vary in length from about 34 feet to 75 feet. The average length is about 43 feet, outside over-all measurements.

The map shows principal Montreal trackage, indicating how the new terminal has been tied into the existing network to better advantage.

Below is the track plan and a cross-section of the new terminal.



Courtesy Canadian National Railways.

All photos by courtesy of Canadian National Railways.

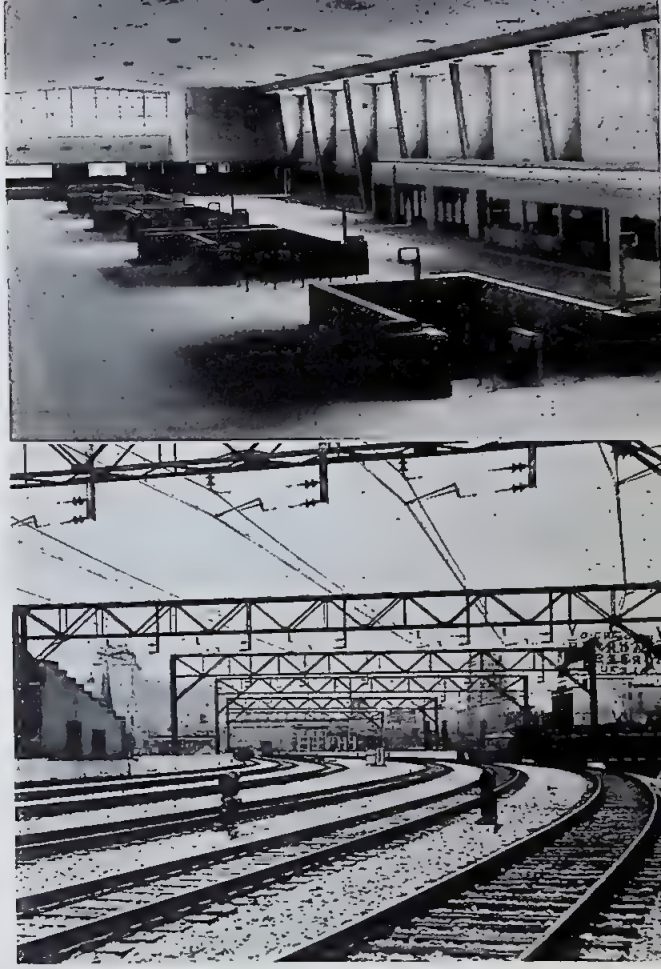
tion. The concourse is a large rectangular room 350 feet long by 104 feet wide. The walls and ceiling are buff in color with blue tapering piers rising beside the walls from the floor to the ceiling at 25-foot intervals. Along the center of the concourse, at 50-foot intervals, are the parapets enclosing the stairs and escalators leading to the track platforms on the level below. The escalators are reversible in operation and can be made to move in accordance with the flow of traffic.

The floor of the concourse is marble terrazzo of a reddish hue. At each end of the concourse, which runs east and west, are two large windows of plain glass which let in a flood of light. The general waiting-room is at the east end of the concourse, and additional facilities in other parts of the station include a women's waiting-room, nursery, travelers' aid, navy and army information booths, R. C. A. F. staff headquarters, barber shop, drug store, soda fountain, and immigration rooms. To anyone who wandered around the devious passages in the old Bonaventure Station, the simplicity of layout in the new building is a revelation. The main restaurant provides accommodation for about 100 persons, and three private dining-rooms are also provided.

The traveling public finds access to the new terminal easy and convenient. For taxi cabs and cars there is one main entrance and one main exit. For pedestrians there are several entrances and exits on all four sides.

The new project also takes into account planning for better freight-handling facilities for the CN in Montreal. Strange as it may seem, neither Turcot nor the Point St. Charles yards had, prior to the new terminal project, tracks long enough to accommodate 100-car freight trains; nor did they have a proper system of classification tracks. Trains had to be broken up and re-sorted in a most round-about and laborious manner, which was time consuming and awkward, to say the least.

Now that the new terminal ends movement of passenger trains through the center of the Turcot Yards, it is proposed to construct there in the near future a hump yard which will help to speed freight movements in the city. It is proposed to use Turcot entirely for freight when



The new Montreal Central Terminal fronts on Dorchester Street (left). Unlike many of our large stations, it was not designed as a civic monument but as a plain, utilitarian railroad station, and its appearance is in keeping with its businesslike function. The lines are fundamentally good, and it will not become dated like so many of the Victorian structures which still serve today. At right are the concourse and the south approach tracks.

plans are completed. The coach yards for the new terminal will then be located to the south of the station in the Point St. Charles area near the Montreal side of the Victoria Bridge.

Trains entering the city from the west change to electric locomotives at the Turcot Yards. They then swing south, cross the Lachine Canal, skirt the new Point St. Charles coach yards, then finally swing north, crossing the canal again and gliding into the new terminal. Those trains entering the city from the south and southeast move into the new terminal under electric power, changing over at the city end of the Victoria Bridge. These trains also skirt the coach yards and head north into the terminal. Trains from the north use the tunnel as their entrance and are hauled by electrics from a distance of 17 miles outside the city. This line, coming through the tunnel under the famous Montreal Mountain, has been electrified for some time and has been in use for a good many years, being part of the old Canadian Northern line between Montreal and Ottawa.

Electric locomotives now in use are black box-type design with two four-wheel trucks. Six are of 1100 horsepower with 40,000 pounds tractive effort, and nine are of 1400 horsepower and 60,000 pounds tractive effort. Operation is by overhead distribution, 2400 volts, and regular pantographs are employed. The wires are supported by steel-girder construction, although in some sections wooden posts have been used—due, no doubt, to steel priorities. In all likelihood these will be replaced after the war.

What the railfan misses more than anything else at the new terminal is the freedom of the old Bonaventure Station. Whatever may be said against the old layout, it certainly held no barriers for free-and-easy inspection of all motive power and equipment as far as passenger traffic was concerned. One used to be able to stroll around for hours unmolested, and passing through the gate was a simple matter.

With the advent of the silent electrics, the romantic atmosphere of the steam engines which haunted the old Bonaventure for so many years is gone forever. With clean electric efficiency, such famous trains as the CN'S *International Limited, Maritime Express* and *Continental Limited,* the Central Vermont's *Washingtonian* and *Montrealer,* and the Rutland's euphonious *Green Mountain Flyer* sneak quietly in and out of the new station.

The giant 4-8-4's of the CN, the rebuilt 4-8-2's of the CV, and the efficient 4-6-2's of the Rutland are sadly missed. These locomotives can still be seen at the points of transfer from steam to electric, but the thrill is not the same. A

Cost of starting and stopping.

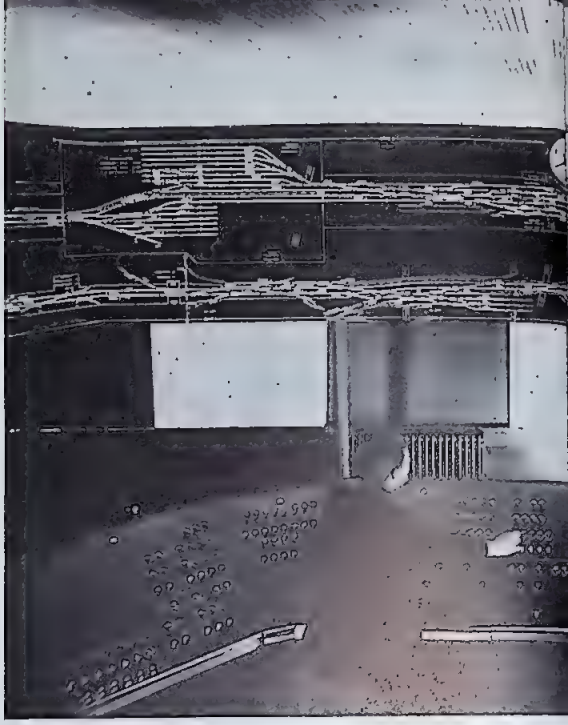
Statistics compiled in 1935, based upon previous years, indicated costs of from 84 cents to $2.80 for stopping and starting a passenger train, and from $1 to $4.80 for stopping and starting a freight train, according to the Association of American Railroads. Costs vary according to the length and weight of the train, size of crew, and other factors. Labor and other costs have since increased, and present-day costs would probably be somewhat greater.

fresh electric locomotive hauling a string of Pullmans that have been swinging through the night for 400 or 500 miles makes one realize how unimaginative the new set-up is.

But such are the ways of progress; and this writer would be the last to deny that the new facilities do not offer the most up-to-date and efficient means of railroading.

The signaling in the terminal area is all controlled from a central point near the Lachine Canal lift-bridge. Operation of the switches and signals is by power supplied by batteries in the centers of the various controlled areas, but the control itself is by a code system over control wires from the relay interlocking in the main tower. The control machine is of the usual type employed with recent all-relay interlocking. Each control key controls one switch, crossover, or signal; and the pressing and turning of the control key sets up the proper code to remotely control the operation. As with all modern interlockings, block signaling is also incorporated so that when a train passes a signal the top arm automatically returns to stop without action on the part of the signalman. The presence of trains and their progress through the terminal layout is shown by lights on a large track diagram.

Sixty-two clocks, big and little, have been installed for service both to railway employees and the traveling public. They are placed in prominent and convenient locations, with two large double-face clocks suspended in the concourse. All station and headquarters clocks of the Canadian National are regulated from McGill University Observatory, and are checked every day through telegraphic circuits.

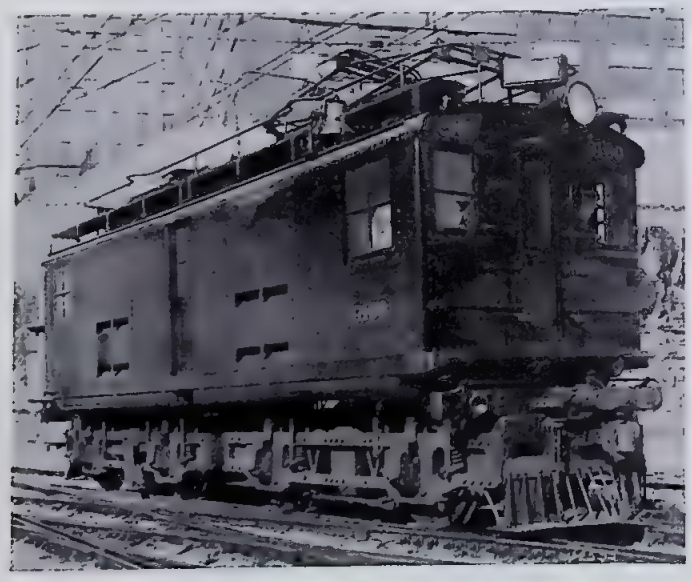


The Churchill and Roosevelt specials were routed by this interlocking board when they passed through Montreal at the time of the Quebec Conference. Every train or engine movement between the tenth span of Victoria Bridge, Turcot Center, and 150 feet inside the tunnel is indicated on the immense wall diagram, and the switches and signals are set up

A public-address system has been installed with outlets in the concourse and at every other spot where travelers are likely to congregate.

Train platforms are of the modern high type, flush with the level of the passenger-car vestibules. While this style of platform is common in the United States, it is a rarity in Canada, and is a most welcome advance. The stairways leading from the concourse to the track platforms are located in the middle of the platform length, saving travelers many steps. Baggage and express trucks, which have been scaring the daylights out of the traveling public for years, use ramps at the far ends of the platforms and do not operate anywhere near the public.

Below the platform level is another great area where express and mail facilities, as well as offices of the Canadian and U. S. Custom officials, are located. Above the station concourse,



by keys on the 34-foot control panel. Within the terminal area trains are pulled by black box-cab electric locomotives like the 9100 (below, left). The tunnel approach to the new terminal is shown below at the right. This line under Mount Royal was part of the old Canadian Northern to Ottawa and was electrified years ago.

with which they are connected by elevators, are two office floors occupied with but one exception by departments of the railway and of allied companies engaged in the operation of the terminal or the train services using it.

One does not have to crane his neck to see the train arrival and departure board at the new terminal. Instead of the conventional board rising high toward the ceiling, the top of the board terminates at eye level.

Twelve ticket wickets are available. Three double ticket-racks have been installed housing 3500 tickets, and two end racks each carry a duplicate supply of 1360 destination-printed tickets. A middle rack accommodates coupon tickets upon which the ticket seller fills in the destination at time of purchase. Destination-printed tickets make up about 88 per cent of all tickets sold at the new terminal. Busiest period for the ticket-selling staff is in the early evening and up to nearly midnight, when trains leave for the East and West and Toronto, Chicago, Boston, New York, Philadelphia, and Washington.

Real activity starts at the new terminal at around 7:30 in the morning, with the arrival of the *Ocean Limited,* the road's all-Pullman train from Halifax. This is immediately followed by overnight trains from Toronto and Chicago. Then come the Washington, Boston, and New York trains. After the *Continental Limited* pulls in from the West Coast around 9:15, things slacken off somewhat. The night busy-period starts again around 7:30 when the *Ocean Limited* goes East and the other trains mentioned above leave in reverse direction.

Conductor J. L. Falardeau had the distinction of pulling the signal cord for the last train to leave the old Bonaventure Station before the official change-over in July. The train was a local to St. Hyacinth, Que., and was the second train to arrive at the new terminal next morning. George S. Day was the engineer. As the local pulled out of the old station it brought to a close nearly 100 years of busy railroading. However, the old station will not be closed up until after the war.

Old Bonaventure was formally opened on November 22, 1847, when the first train of the old Montreal & Lachine Railroad inaugurated regular service into the city. The station later became the terminal for the Grand Trunk Railway and finally for the Canadian National Railways. While the new station is referred to as the "Central Terminal," many people hope that the name of Bonaventure will be carried to the new station when old Bonaventure is torn down.

Troop Sleeper

By Lawrence W. Sagle.

For the first time in the history of our nation, special types of passenger cars are being supplied for troop transportation. The construction of 1240 especially designed troop sleeper cars is in full swing, and some of the equipment has already been put into service. Four hundred similar up-to-date troop kitchen cars are also being built. The Pullman Standard Car Manufacturing Company is building 1200 of the sleepers and the Pennsylvania Railroad is completing the order with 40. The first of these cars was placed on exhibition in Washington Union Station late last Summer.

Although Pullman is lettered on the cars, they do not resemble a Pullman sleeper in any way. Only 50 feet long and weighing 75,000 pounds, the cars outwardly appear to be windowed steel box cars. But, in spite of the severity of appearance, they are designed for the greatest possible comfort.

The troop sleeper is entered through center doors that can be opened only from the inside. The car is divided by a foyer from which the aisles, set opposite, extend down to the ends of the berth areas. End doors permit passage from one car to another, and diaphragms, vestibule curtains and Fowler buffer springs insure the same safety and convenience in passing from one to another as in regular Pullman equipment. Ten large windows on each side of the car and two smaller ones on each side at diagonal corners provide plenty of light for daytime travel. All windows are equipped with sliding screens and blackout curtains, and roof-top ventilators provide for air circulation.

Heat is provided by fin-type radiation enclosed in grills along the sides at the floor. Electric lighting, giving sufficient illumination for reading in the berths, is furnished by a new type of battery known as the "air cell." Water from overhead tanks, one in each end of the car, is gravity-fed to toilets and wash stands, and hot water is obtained by means of indirect heating, thermostatically controlled from the train steam line.

The arrangement of the berths is similar in principle to designs developed just before the war by the Pullman Company—designs which the company expects to introduce on a wide scale after the war for the tourist trade. Berths

No. 7000 is the first of the 1240 special sleeping cars being built for troop-train service. While the severe exterior looks more like a box car with windows than like a Pullman sleeper, the interior is comfortably equipped (above).

Statement of the Ownership, Management, Circulation, etc., required by the Acts of Congress of Aug. 24, 1912, and Mar. 3, 1933.

Of TRAINS, published monthly at Milwaukee, Wis., for Oct. 1, 1943.

State of Wisconsin, County of Milwaukee, ss.

Before me, a notary public in and for the state and county aforesaid, personally appeared A. C. Kalmbach, who, having been duly sworn according to law, deposes and says that he is the editor of TRAINS and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption required by the Act of Aug. 24, 1912, as amended by the Act of Mar. 3, 1933, embodied in section 537, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business manager are: Publisher, Kalmbach Publishing Co., 1027 N. 7th St., Milwaukee, Wis.; Editor, A. C. Kalmbach, 4821 W. Woodlawn Ct., Milwaukee, Wis.; Managing Editor, W. V. Anderson, R. 3, Box 361, Waukesha, Wis.; Business Manager, Henry H. Kirtland, 403 Lake St., Pewaukee, Wis.

2. That the owner is: Kalmbach Publishing Co., 1027 N. 7th St., Milwaukee 3, Wis.; William B. Calhoun, 2505 Brady Ct., Davenport, Ia.; Drayton Cochrane, 157 E. 63rd St., New York, N. Y.; W. D. Collett, 8038 Drexel Ave., Chicago, Ill.; Robert J. Fakler, 2874 S. Delaware Ave., Milwaukee, Wis.; Arthur E. Hughes, 605 Murdoch Rd., Baltimore, Md.; A. C. Kalmbach, 4821 W. Woodlawn Ct., Milwaukee, Wis.; B. G. Kalmbach, 4821 W. Woodlawn Ct., Milwaukee, Wis.; Mae C. Kalmbach, 1140 N. 37th St., Milwaukee, Wis.; Henry H. Kirtland, P. O. Box 215, Pewaukee, Wis.; Joseph C. O'Hearn, 1609 N. 40th St., Milwaukee, Wis.; Frank Taylor, R. 11, Box 640, West Allis, Wis.; M. D. Thornburgh, 105 S. Mulberry St., Chillicothe, O.; Linn H. Westcott, 1362 N. 39th St., Milwaukee, Wis.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: None.

A. C. KALMBACH, Editor.

Sworn to and subscribed before me this 20th day of September, 1943.

MARTHA LEGER,
Notary Public, Milwaukee County, Wis.
[SEAL.] (My commission expires Sept. 14, 1947.)

are in three tiers, each car to sleep 29 soldiers. One berth, for the porter, is isolated from the rest. All are set laterally in the car, instead of fore and aft as in standard sleepers, and the aisle runs along one side of the car.

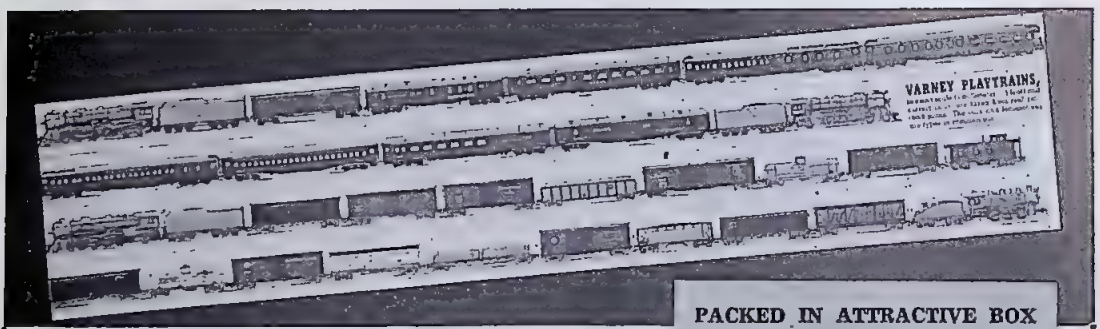
The car interiors have somewhat the appearance of Continental coaches during daylight use, with wide, triple-breadth seats grouped in sections on one side. At night the backs of the seats are raised into position to form the middle berth, while the seat itself remains in position to form the lower berth. The upper berths are fixed and may be used at any time. Each section is equipped with racks for weapons. There is 22½ inches of space between the lower and middle, and middle and upper berths, and 31 inches between the upper berth and the roof. Berths are six feet long and 30 inches wide.

The new sleeping cars will provide 34,800 additional berths nightly, which should greatly augment the present supply of sleeping cars for organized troop movements. About 6000 Pullman sleepers have heretofore been assigned for this purpose, carrying approximately 66 per cent of all mass troop movements. And while the O. D. T. and the A. A. R. will give no encouragement in that direction, it is the hope of many harrassed railroad traffic men that the use of these new cars may make it possible to release some of the standard sleepers for essential civilian travel.

The equipment will be the property of the Defense Plant Corporation, a subsidiary of the R. F. C., but will be operated and maintained by the Pullman Company under arrangements approved by the Army Transportation Corps and the A. A. R. The R. F. C. will be paid a rental, on a mileage basis, by the railroads and the Pullman Company. A tariff has been worked out by which the War Department will pay approximately day-coach rates for troops transported in the new sleepers.

The cost of these troop sleepers will be but a fraction of the cost of standard Pullman sleeping cars, as they are designed and constructed along new lines, using noncritical materials to the greatest possible extent. Production schedules call for completion of the 1240 sleepers by the first of the year.

"I get my meals free."



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9 PASSENGER CARS
16 FREIGHT CARS
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Children like trains—your children or your neighbors' children. And the surprising thing is that the trains don't even have to run. Children are crazy about Playtrains—fascinating, true-to-scale (1 mm. to the foot) reproductions on small rectangles of heavy cardboard. The cars and locomotives can be rearranged at will into reefer blocks, mail trains, solid Pullman limiteds, switch runs, or what have you. With four sets your children (and maybe you too) can have endless fun putting together attractive, realistically colored trains on the dining-room table.

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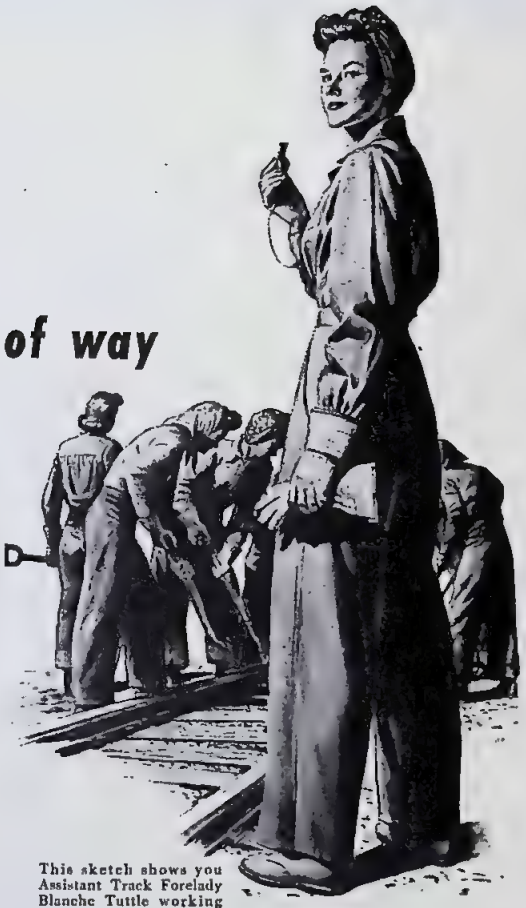
ANGELS

guard our right of way

We railroad people refer to a fast train as a "hotshot." The locomotive engineer is a "hogger" and a trainman's badge a "brain plate." So you won't be surprised to learn that several thousand "angels" now work for Southern Pacific.

Pretty Mrs. Blanche Tuttle, soldier's wife, is one of them. She directs about 35 women who work on railroad track in California's apple belt.

"I wanted to get into war work and do my bit," Mrs. Tuttle explains. "The railroads must run, and railroad track must be kept in good condition. I'll stay on my S.P. job until my husband comes home."



This sketch shows you Assistant Track Forelady Blanche Tuttle working at her railroad job . . .

SOUTHERN PACIFIC, which crosses more mountain ranges than any other railroad, has always been a *man-size* job of railroading. From our S.P. organization more than 13,000 men have gone into the armed forces. We miss these tried and true railroaders and we sorely need more manpower. But today we're filling numerous gaps with—*womanpower.*

Women operate many of the giant steam hammers in S.P. shops, many of the bolt cutting machines, drill presses and lubricating machines. They wipe down locomotives, sort and cut scrap, clerk in the yards and roundhouses, pack journal boxes.

Women serve as rivet heaters, firelighters, turntable operators, crew callers, blacksmith helpers, stationary firemen, sandhouse attendants. The list of S.P. jobs women are doing is almost endless.

WHEREVER S.P. TRACKS RUN—over 15,000 miles of line in the West, Southwest and South—women today are handling men's work.

Women are "working on the railroad" from San Francisco by the Golden Gate to New Orleans in the deep South. Up and down the Pacific Coast from Portland to San Diego . . . and over the Sierras to Ogden in Utah. Southern Pacific is the West's largest railroad and we serve more military and naval establishments than any other line in the nation. Our traffic load is now the heaviest in history.

So you can see why we are very proud of the womenfolks who help guard our right of way and work at other vital jobs along our lines. We know their men in the fighting services are proud of these women, too.

S·P

The friendly Southern Pacific

HEADQUARTERS: SAN FRANCISCO

One of America's railroads—
ALL united for Victory!

The Man in the Tower

By Edward Hungerford.

WHEN the American railroad really buckles down to its job right here in the United States, as it is doing at this very moment, it does a man-sized job. When it goes overseas and sets up business in lands thousands of miles away from the homeland, it becomes sort of a superman. Word now is seeping through of the vastly capable job that our railroad organization has done, still is doing, in North Africa, followed by a superb show in Sicily, another in Italy . . . still another elswhere. . . . The Yankee locomotive and the Yankee railroader overseas! It is a fascinating picture.

If you had chanced to be anywhere along a main line of railroad here in the United States within the past year or so, you might have noticed an engine or train under the control of a man in the uniform of the United States Army. If you had been privileged to go into the offices of the division of that railroad, you might possibly have seen more men in uniform, at the desks of the trainmaster and of the dispatcher—perhaps even at the desk of the superintendent of the division himself. In the nearby roundhouse you might have found other men in uniform, busy at the thousand-and-one tasks of operating a railroad in wartime.

Had Uncle Sam suddenly reached out and taken over the railroad for himself, and his own wartime necessities? Not a bit of it. That railroad was doing a sort of volunteer job; it was, in part at least, turning over one of the busiest stretches of its line to the army, handing it over as a sort of training school for the United States Military Railroad.

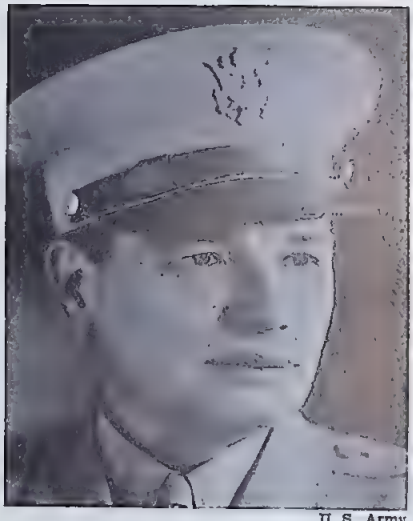
THE United States Military Railroad, an important adjunct of the army, is a creation of the present war. It is headed by Brigadier-General Carl R. Gray Jr., son of a distinguished railroader, the late Carl R. Gray, formerly president of the Union Pacific—and himself a railroader of no small distinction. General Gray at the time of his induction into the army was the executive vice-president of the Chicago & North Western Railway, with headquarters at St. Paul. . . . Gray went at his new task with a fixed determination and purpose. He decided that if the army, as a part of its large problems of war transport of every sort, had railroads to run, they should be organized and staffed as commercial railroads and run as railroad men would run them.

The operating unit of the railroad in the United States is the *division*, which may be 20 miles long or 600, or even more, depending upon the density and character of the traffic to be handled. Therefore, in General Gray's scheme of things for the United States Military Railroad, an army battalion becomes a railroad division. Three or four ordinary railroad divisions become a sort of grand division, often under a general superintendent, sometimes under a general manager. On the Military Railroad, no matter where it may be, a single division will be planned to handle from 90 to 150 miles of track; a grand division from 270 to 500 miles.

Starting with the division unit, there will be at least four companies to the battalion that is assigned to it. First there will be a headquarters and service company, looking chiefly after the housing, the mess (two large problems that do not arise in ordinary railroad operation), and the supplies, as well as furnishing the chief train dispatcher, who is ranked as an army lieutenant. Then there will be a company with a captain (roadmaster) to look after the maintenance of way, putting down and taking up track, as well as bridge and building work. A third company does the purely mechanical work of the division, with its captain, a practical railroad master mechanic, in charge of maintenance of locomotives and cars for road service. The fourth looks after the transport job of the division. Its captain is a trainmaster and his lieutenants are the road foremen of engines, the yardmaster and the like.

This sort of a battalion has approximately 23 officers and 850 enlisted men. The railroad shop battalions, organized for heavier locomotive and car repairs, have the same number of officers but about 200 fewer men. They are built up of men already well experienced in railroad shop work.

Throughout the entire Army Railroad organization, officers, who are assigned military ranks from second lieutenant to brigadier-general, also carry the appropriate railroad designation. Thus, the commander of the whole service, Brigadier-General Gray, is known as general manager of the Military Railroad; officers directly under him are known as assistant general managers. The assistant general manager of transportation has in his department a general superintendent, a general superintendent of car service, a general superintendent of terminals, and a superintendent of telegraph and telephone. The chief of the equipment department is known as the assistant general manager of equipment, and he is a superintendent of motive power. He has under him a superintendent of cars, a superintendent of shops, a mechanical engineer, etc. And so it goes, all the way down the line. Even through such special work as track and stores and signals and fuel



U. S. Army.

General Gray.

and water supply, each railroader in uniform is a specialist in his own difficult task.

THIS is the sort of organization that is helping to win the war for us overseas: organization, plus the human element in the railroader in khaki. . . . To build up, almost overnight, this far-spread organization of well qualified men, the army asked the cooperation of the larger roads of the land. Specifically, they were asked to accept sponsorship of various units for the Military Railroad. To a road, they at once responded, despite the fact that it meant thinning their ranks of men more needed than at any other time in recent history. Most of the roads took on the sponsorship of at least one unit; a goodly portion of them, two; a few of them, as many as four. Even the locomotive builders did their part. Smaller roads, already grievously short-handed, grouped themselves together to form a unit. . . . The response was all but universal. When he makes up his mind to do it, Old Man Railroad generally does a thing in a great big way.

The railroaders, once inducted into the United States Military Railroad, receive first the standardized forms of preliminary military training. Then comes the specialized training for service as a military railroader. Serious-minded men, dressed in the uniform of Uncle Sam, are studying, long hours and hard, in railroad shops and offices. . . . One day the dispatcher slips out from his seat at the desk he has occupied so long; a man in uniform replaces him, gives instructions to the men down the line—this train to move this way, this train to move that . . . 4 to meet 15 at Railroad Mills . . . First 17 to make an unaccustomed stop at Derryville. . . . The old yardmaster slips out of his seat. . . . Soon this fellow in olive drab is operating the hump and doing a good job of it. Perhaps the next railroad yard he will be operating will be off in France somewhere, and the dingy little gray-and-red four-wheel freight cars will have "Hommes 40—Cheveaux 8" painted upon their sides.

HERE is Bill Breen.

Bill Breen, like Carl Gray, was born to railroading. Only Bill's father never aspired to anything like a railroad presidency. He was content to be a mechanic, and a mighty good mechanic at that, in the back-shop of the XY&Z Railroad, at its headquarters in a small Ohio city. . . . Bill cannot remember the day when he was not hanging around that back-shop and the roundhouse that joined it. . . . At 12, he could run a locomotive. And did. . . . At 15 he could operate a lathe or a milling machine. He was railroad-minded and he was machinery-minded—not a bad sort of combination.

When World War II came, bursting its way upon a maddened and astonished nation, William Breen, of Cosmopolis, O., had just turned his twenty-sixth birthday. . . . Married. . . . Two kids. . . . Liked fishing, also rummy (not rum) and could dance with Mrs. Bill like nobody's business. . . . Is a member in good standing of his Brotherhood and aspires to the Cosmopolis Rotary Club. . . . Goes to church occasionally—when he does not feel too lazy, after a hard week's work in an engine cab. . . . Earns pretty good money. Has some stowed away in War Bonds and the bank, in addition to owning his house. A neat and pretty house it is, with a garden in the rear and catalpa trees in front.

At 25 the trainmaster called him in and said that he could have an engine run, this time at the throttle side of the cab. After long years of depression and engines in white lead, the XY&Z was beginning to throb with traffic again.

All that was in the early days of 1940, many months before Pearl Harbor. When Pearl Harbor came Bill was as fighting mad as if the Japs had dropped a bomb right into the middle of his front parlor. . . . The XY&Z began organizing a unit for military service. Bill at once heard of it . . . talked it over with Mrs. B., who asked him if he was compelled to go; and when she had received a slightly profane "No," told him to go anyway, and all her blessings upon him.

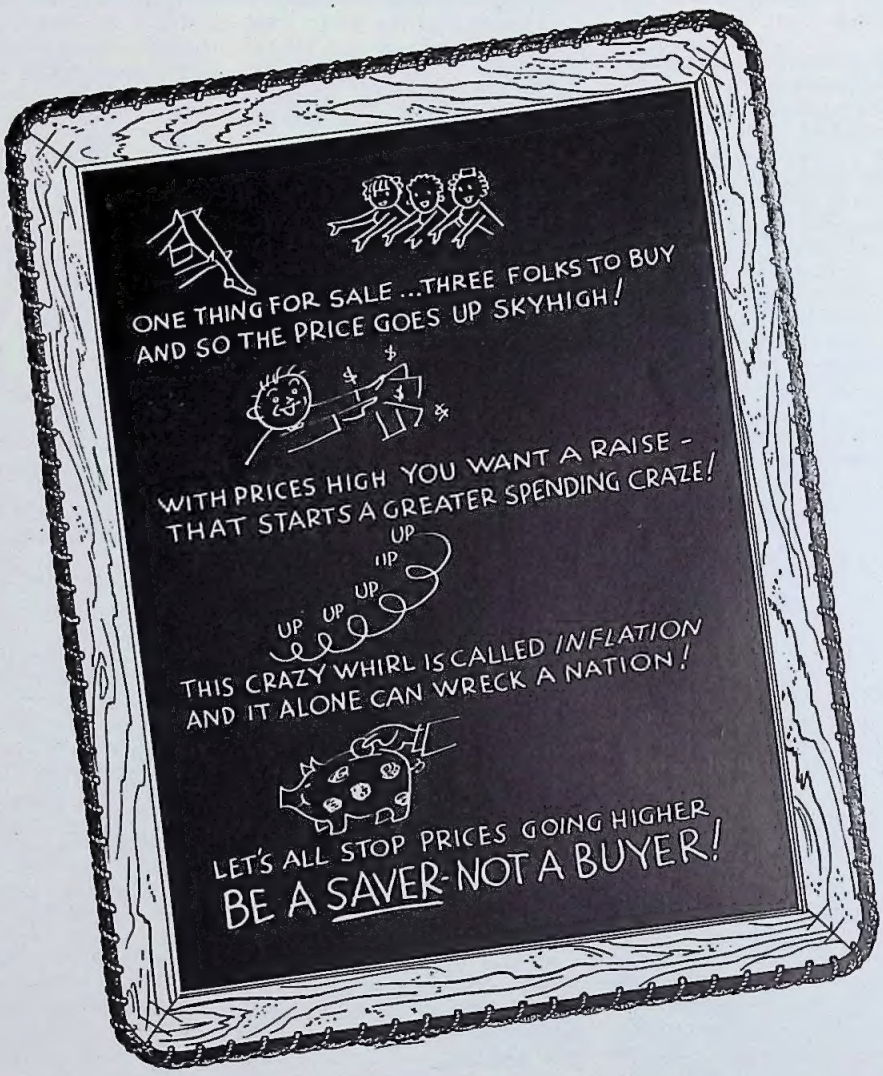
Bill is already a crack engineer in the military railroad. Before long he will be going higher and they will be attaching those little silver gadgets to his uniform. But he is in no hurry for them. It was too much fun running a 4-6-2 over that little, wobbly, hastily constructed army railroad down in Louisiana and wondering what it would be like, running a locomotive in Africa, with miles and miles of desert and whitewashed, flat-roofed little towns, with undressed children coming out of the houses and standing beside veiled women to see the Iron Horse from far away . . . perhaps to see an occasional tiger come out of the jungle. Bill's idea of geography, outside the U. S. A., is a bit vague.

Before Bill Breen is done with the army, he may see a lot of places other than North Africa.

He may find himself toting a locomotive up the left-hand side of a double track in Europe. . . . Yes, Europe. . . . No desert country now, but one lush with foliage and with fine, fat fields—or, rather, fields that once were fine and fat, before Mars came streaking across them . . . rushing by little towns and villages that were centuries old, gray and weatherbeaten, while his native Ohio was still a wilderness . . . swishing close to the platforms of battered little railway stations, with curious names upon their faded boards . . . diving into one tunnel after another—tunnels as close together as grade crossings in Ohio . . . passing funny little engines, with queer symbols upon their tanks, no bells, and sharply shrill whistles that go "tweet-tweet" instead of the long, deep "whoo-whoo" of an honest-to-god American locomotive . . . engines "tweet-tweeting" every time they pass one another or go diving into the inky blacknesses of another tunnel. Bill Breen would like to tackle the throttle of one of those babies some day . . . would like to take one right into Berlin itself . . . perhaps catch one of those heinies walking across the track and looking in the other direction.

Multiply William Breen several thousand times and you see, more clearly than ever, Old Man Railroad tackling this man's war with swift verve and fearlessness. His methods are devious but they are sure. And not for one moment does he move his thousands of locomotives, overseas as well as at home, without its being a distinct move toward victory. Old Man Railroad is doing his part—on all sides of the seven seas.

Edward Hungerford


ONE THING FOR SALE ...THREE FOLKS TO BUY
AND SO THE PRICE GOES UP SKYHIGH!
WITH PRICES HIGH YOU WANT A RAISE -
THAT STARTS A GREATER SPENDING CRAZE!
UP
UP
UP
UP
UP
THIS CRAZY WHIRL IS CALLED INFLATION
AND IT ALONE CAN WRECK A NATION!
LET'S ALL STOP PRICES GOING HIGHER
BE A SAVER-NOT A BUYER!

Seven things you should do:

1. Buy only what you really need	2. Pay no more than ceiling prices... buy rationed goods only with stamps	3. Pay off old debts and avoid making new ones	4. Support higher taxes ...pay them willingly	5. Provide for the future with adequate life insurance and savings	6. Don't ask more money for goods you sell or work you do	7. Buy all the War Bonds you can afford – and keep them

Keep prices down...use it up, wear it out, make it do, or do without

This advertisement, prepared by the War Advertising Council, is contributed by this magazine in cooperation with the Magazine Publishers of America.

Correspondence

Your "Man in the Tower" may know his trains, but in the September number he is certainly off the beam about Canada. Writing about the diner on the CPR's *Alouette*, he says, referring to Canada, ". . . in a neighboring land which knows naught of food or gasoline shortages—or of O. P. A.'s and O. D. T.'s and all the rest of it." The Towerman ought to read more about Canada in wartime. Canada has its counterparts of O. P. A. and O. D. T. and all the rest of it—wartime boards by the dozens. And food is rationed—butter, meats, coffee, tea, jams, etc. Gasoline is rationed, too, and pretty severely. Canada is no "peacetime-like land of milk and honey" and its civilians are feeling, just as Americans, all the effects of war. To read Mr. Hungerford, one gets a distinctly contrary impression.

H. H. Kritzwiser, 2078 Haywood Ave., West Vancouver, B. C.

Yes, the *Ambassador* of the Central Vermont - Boston & Maine is considered mighty slow at the present time, as stated by "The Man in the Tower" in the September issue. But this is another casualty of World War II. The *Ambassador* has been a fast train and formerly made the 327.2-mile run in 8 hours 20 minutes southbound and 8 hours 15 minutes northbound; 1 hour 35 minutes has been added to the northbound run and 1 hour has been added to the southbound run. The southbound *Ambassador* now makes the trip in 9 hours 20 minutes rather than 9 hours 40 minutes.

Elwin K. Heath, 16 Nelson St., Barre, Vt.

In the August issue of TRAINS you state that the Monson "is the only survivor" of Maine's family of two-foot-gauge lines. I was in Monson in August. The Monson is still there, yes; but little No. 14 is sitting in the engine house under lock and key and with not so much as an ash in her fire box. . . . At Monson Junction I found most of the road's rolling stock. Most of it was so surrounded by weeds that I couldn't see the trucks. . . . Out on the line, the track was still laid, but the ties were rotting and weeds were sprouting. I learned that the road's owner, the Monson Slate Company, is awaiting the word from the authorities to begin wrecking operations. . . . When the Monson ceased operating last Winter, it ended a long, colorful history of two-foot-gauge lines in Maine.

Lewis Bowman, 59 White Plains Rd., Bronxville, N. Y.

[The *Official Guide* for September, 1943, still carries the listing of the Monson Railroad dated September, 1942: "Operated for freight service only."—*Ed.*]

In the caption "Around Cape Horn" in September TRAINS, the impression is given that the around-the-Horn route is no longer used, having been replaced by a tunnel. This was the original intention when the tunnel was built, and both tracks were run through the bore; but the cutoff had too steep a grade for upbound trains and the upbound track was rerouted around the original rocky ledge. The tunnel is used by descending trains only.

Sgt. Jim Morley, U. S. Army.

J. L. Schaeffer wrote, in "The Railroads of Bethlehem" [September TRAINS] that the Jersey Central "used to be a road of short trains . . . seldom more than 30 cars." I am an engineer on the Central, and back in 1927, '28, '29 and '30, when I was assigned to Jersey City-Allentown pool freight service, we seldom pulled less than 90 cars. Our freights were always around the century mark. I myself have had as high as 154 behind me eastbound through Bethlehem. . . . He stated that *light* Pacifics do most of the hauling. The Central never owned a *light* Pacific. . . . The *Bullet* was painted olive green, not light blue.

Ed Lohr, 8343 118th St., Kew Gardens, L. I., N. Y.

Our September cover

You may have wondered about all the women at work on September magazine covers. It was a concerted move by the National Publishers' Association and the O. W. I. to show the importance of woman-power in the war. The Museum of Modern Art, New York, awarded TRAINS honorable mention among trade magazines (which we don't think we are, but they did). Our woman roundhouse worker cover photo was taken by Frank Taylor, editor of our other magazine, THE MODEL RAILROADER.

Even if you do give your new address to the letter carrier, magazines will not be forwarded from one city to another. A notice of change of address to the publisher is absolutely necessary or you'll be missing copies—and then don't blame us. Instead, when you move, send us a notice, giving both old and new addresses, and send it before the 15th of the month to catch our next month's mailing.

We are making up, especially for gift purposes, a very limited, individually numbered, single-volume edition of our four albums of railroad photographs. This single volume will be superbly bound in extra heavy padded cloth covers, in every way a book for the collector. $10 postpaid.

"Locomotives On Parade" is one of the most popular locomotive books. Written by Edward Hungerford, it is a history of American locomotives, peppered with illustrative anecdotes such as could be told only by a man who has loved and studied locomotives during a long lifetime. We've sold a lot of copies in the past, and we know we'll sell a lot more in the future, for this is the kind of book that one railfan recommends to another. Postpaid, $2.50.

TRAINS' 24 x 38-inch four-color Railroad Map of Colorado will be ready soon, an improvement based on our experience with the 17 x 22-inch three-color Railroad Map of Pennsylvania. The Colorado map will be $1 postpaid. Present orders will be filled in order immediately on publication. The Pennsylvania map is available in stock at 50 cents postpaid.

The Annual Index for Volume 3 (November 1942-October 1943) is included with this issue of Trains for all direct-mail subscribers. Other readers may obtain a copy free by writing for it.

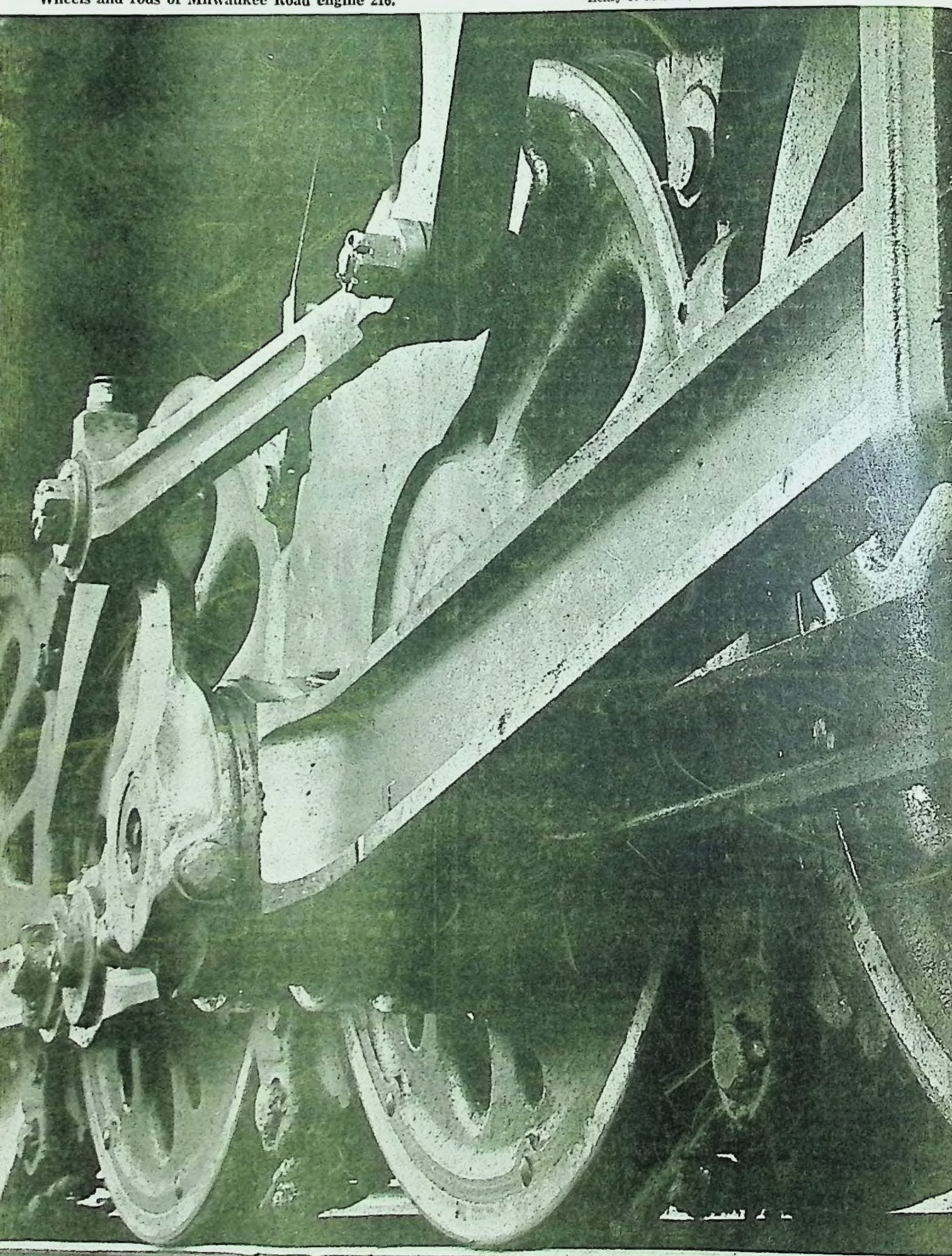
Best new railroad book in months is *Clear the Tracks!* by Joseph Bromley, the story of an old-time locomotive engineer. It is told in autobiographical style, and is full of the flavor and romance of railroading a generation or two ago, before the book of rules had tamed down the profession of locomotive driving. But *Clear the Tracks!* is not a blood-and-thunder pulp type of yarn. It is a well written book, an authentic document. We have it for $2.75 postpaid.

Buy an EXTRA War Bond this month!

Kalmbach Publishing Co.

1027 N. 7th St. Milwaukee 3, Wis.

Trains

Wheels and rods of Milwaukee Road engine 216.

Henry J. McCord, 112 N. Washington St., Batavia, Ill.